

CROES (J. J. R.)  
FIRST ISSUE.



# STATISTICAL TABLES

FROM

The History and Statistics  
of American

# WATER WORKS

BY

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M. AM. SOC. C. E. M. INST. C. E.

COMPILED  
FROM SPECIAL RETURNS.



PUBLISHED BY  
ENGINEERING NEWS

TRIBUNE BUILDING

NEW YORK



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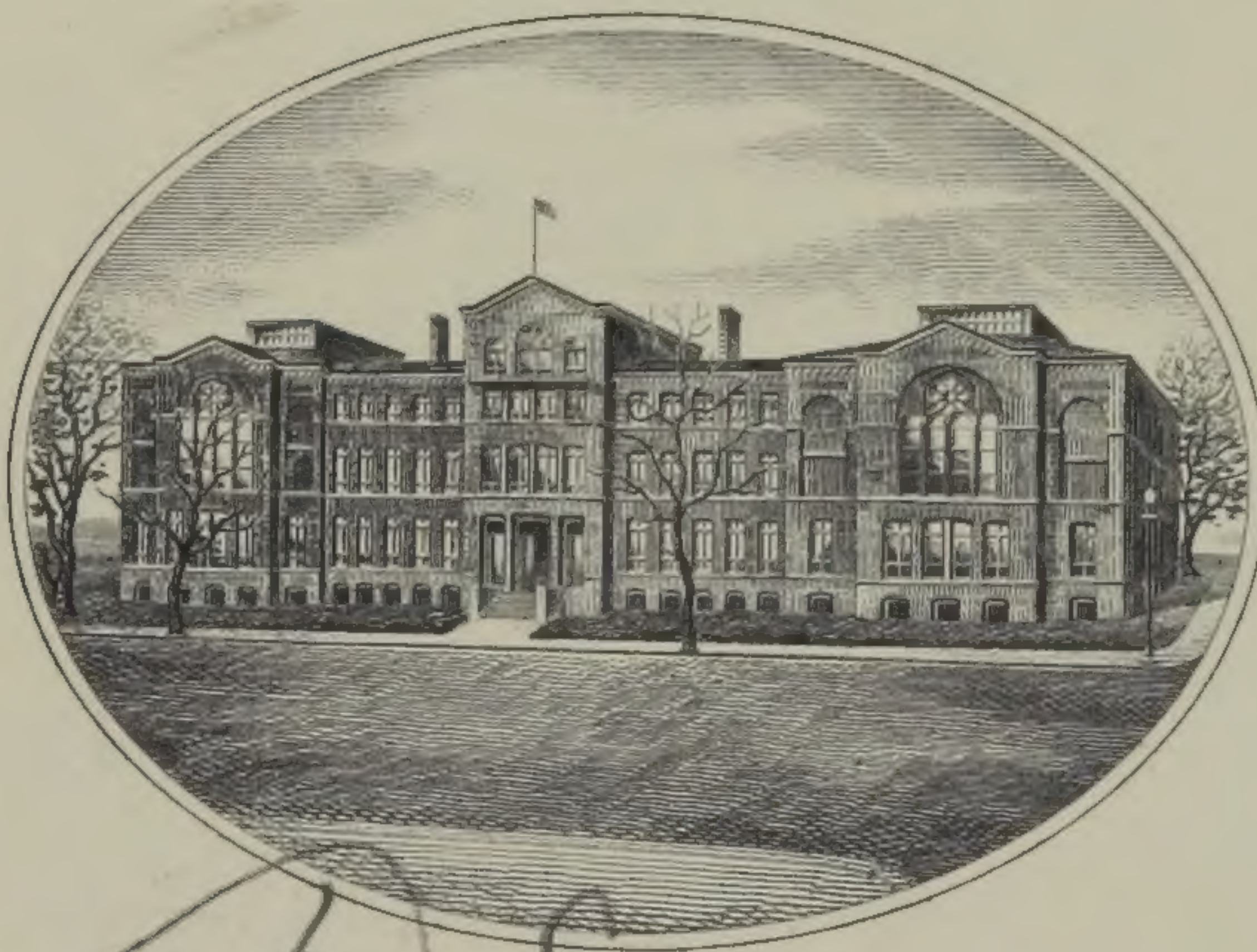


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## Introduction.

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The statistics of Waterworks in the United States and Canada are here arranged in two tables.

In the first table, the names of the 793 places in which it is known that Water Works are in operation or are now in course of construction, are given in alphabetical order, with the source and mode of supply, the cost of the works, and the names of the principal officers as far as can be ascertained.

The sources of supply are classified as Lakes, Rivers, Surface water (which includes small streams impounded by dams,) Springs, Artesian or deep wells, and Ground water, which includes all shallow wells and filtering galleries which are sunk in porous saturated material.

The first number prefixed to each name denotes the rank of the place according to population by the U. S. census of 1880, and also its order in the second table, which contains the principal statistics of the condition and operation of the works.

The second column of numbers in the first table gives the number of the descriptive sketch of the works in the "History and Statistics of American Water Works," which has been in course of publication weekly in *Engineering News* since March, 1881.

All of the information given in these tables is derived from special returns made to the author by officers of the works or residents of the towns, except such names of builders of pumping machinery as are designated (\*) which were obtained from a table prepared by the Holly Manufacturing Company in 1878, and some



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prices paid by towns for use of hydrants, designated (†); which are taken from a table published in 1878 by Mr. E. M. Treman, of Ithaca, N. Y.

The collection of the facts here summarized has been a task of great difficulty, chiefly in consequence of the neglect of officers of water works to reply to the repeated requests sent to them for information.

The author desires to express his thanks to the many officials who have responded, and to the great number of persons who have shown their interest in the subject by aiding him in collecting information, and trusts that the publication of this advance issue of statistical tables will incite those who have not yet responded, to send full descriptions of their works for insertion in the next issue, and in the book which it is hoped will soon be ready for publication.

J. J. R. CROES.

JANUARY 30, 1883.



Alphabetical List of Towns  
which have a Public Water Supply.



## ABI-ATH.

No. in Sta- tistics	No. in His- tory.	Name of Town.	State or Province.	Population, 1880.	Date of Construction of Works.	By whom owned.	Source of Supply.
580	434	Abilene . .	Kansas . . . .	2,360	1882	Company	Ground water.
578		Adams . .	Massachusetts	2,388	not given	Town . .	Surface water.
788		Adrian . .	Michigan . .	7,849	in progress		
584	379	Agawam . .	Massachusetts	2,316	1877	Company	Springs.
135	155	Akron . .	Ohio . . . . .	16,512	1881	Company	Ground water.
357	301	Alameda . .	California . .	5,708	1875	Company	Artesian wells.
22	21	Albany . .	New York . .	90,758	1813-50	City . . .	Surface water and Hudson River.
156	55	Alexandria	Virginia . . .	13,659	1851	Company	Surface water.
585	181	Allegan . .	Michigan . .	2,305	1871	Village .	Ground water.
25	26	Allegheny .	Pennsylvania.	78,682	1847	City . . .	Allegheny Riv.
120	152	Allentown .	Pennsylvania.	18,063	1827	City . . .	Springs.
412		Alliance . .	Ohio . . . . .	4,636	in progress		
791		Alma . . .	Michigan . .	925	1882		
338	232	Alpena . .	Michigan . .	6,153	1879	Company	Thunder Bay and Thunder Bay River.
241	104	Alton . . .	Illinois . . . .	8,978	1875	Company	Mississippi R.
109	79	Altoona . .	Pennsylvania.	19,716	1871	City . . .	Surface water.
431	399	Amherst . .	Massachusetts	4,298	1879	Company	Mill River.
233		Amsterdam	New York . .	9,303	in progress	Town . .	Surface water.
724		Anaheim . .	California . .	833	no returns		
604	142	Anamosa . .	Iowa . . . . .	2,083	1875	Company	Wapsipinicon R.
747	285	Andes . . .	New York . .	496	1876	Company	Springs.
320	383	Annapolis .	Maryland . .	6,642	1866	Company	Springs.
467		Ansonia . .	Connecticut .	3,855	1869	Company	Surface water.
272		Appleton . .	Wisconsin . .	8,005	in progress	Company	Artesian well.
527		Archbald . .	Pennsylvania.	3,049	1875	Company	Surface water.
448	448	Arlington .	Massachusetts	4,100	1872	Town . .	Surface water.
564		Asheville . .	N. Carolina .	2,616	in progress		
343	331	Ashland . .	Pennsylvania.	6,052	1876	Borough	Surface water.
147	191	Atchison . .	Kansas . . . .	15,105	1880	Company	Missouri River.
339		Athens . .	Georgia . . .	6,099	in progress	Company	



No.	Mode of Supply.	Builders of Pumping Machinery.	Cost of Works.	Bonded Debt.	Rate of Interest	Officers of Works.
580	Pump direct	Holly Man. Co.	\$25,000	\$25,000		J. E. Bonebrake, Pres. and Sup.
578	Gravity . . .		not given			C. A. Waters, Sup.
788	in progress					
584	Gravity . . .		6,000			C. L. Goodhue, Own.
135	Pump to res.	H. R. Worthington	360,000	200,000		Edward J. Frost, Treas. & Gen. Man.
357	Pump to tank	H. R. Worthington	not given			Dell Linderman, Sup.
22	Gravity and pump to reservoir.	West Point Found.* Quintard Iron W'orks	1,550,000	1,100,000		G. W. Carpenter, S.
156	Pump to res.		100,000	not given		Francis J. Power, S.
585	Pump direct	Holly Man. Co.	80,000	17,500	10	Clark Nichols, Sup.
25	Pump to res.	A. Hartupee*	1,100,000	593,000		Edw'rd Armstrong, S.
120	Pump to reservoir and stand-pipe.	Bush Hill Works,* W. F. Mosser & Co.	195,650	125,622	7-6-5	S. S. Thompson, Sup.
412	in progress					
791	Pump direct	M. Walker	not given			J. Schwartz.
338	Pump direct	Holly Man. Co.	not given			W. H. Johnson, Sec.
241	Pump to tank	Dean Brothers, H. R. Worthington	not given			Henry Watson, Pres.
109	Gravity . . .		300,000	200,000	7 $\frac{3}{10}$	John A. Baer, Sup.
431	Gravity . . .		60,000	none		E. D. Bangs, Sup.
233	Gravity . . .		in progress			S. E. Babcock, Ch. En. J. McClumpha, Sec.
724	no returns					
604	Pump to res. and pump direct.	Cope & Maxwell Co.	20,000			G. W. Russell, Sec.
747	Gravity . . .		7,000	none		B. Johnson, S'c. & T. T. S. Miller, Sup.
320	Pump to res.	H. R. Worthington	125,000	34,000	6	A. Randall, P. & Sup. J. D. Hodges, Sec.
467	Gravity . . .		no returns			D. Bartholomew, S.
272	Pump direct	H. R. Worthington	in progress			J. M. Payne, Sec.
527	Gravity . . .		14,000			unknown.
448	Gravity . . .		433,636	300,000	5-6	S. Stickney, Sup.
564	in progress					
343	Gravity . . .		63,100	53,000	6-4	Fred. Rodrian, Sup.
147	Pump to res.	Cope & Maxwell Co.	150,000	80,000	7	J. B. Quigley, Sup.
339	Pump to stand- pipe.		in progress			C. E. Robinson, M.



## ATH-BER.

No. in Sta- tistics	No. in His- tory.	Name of Town.	State or Province.	Population, 1880.	Date of Construction of Works.	By whom owned.	Source of Supply.
678	300	Athol . . .	Massachusetts	1,372	1876	Company	Surface water.
52	77	Atlanta . . .	Georgia . . .	37,409	1875	City . . .	Surface water.
481		Atlantic . . .	Iowa . . . . .	3,662		Company	
365		Atlantic City	New Jersey . .	5,477	no	returns	
598		Attica . . .	Indiana . . .	2,150	no	returns	
615	176	Attica . . .	New York . . .	1,935	1879	Company	Surface water.
197	311	Attleboro . .	Massachusetts	11,111	1873	Town . .	Wells and Mill River.
227	192	Auburn . . .	Maine . . . . .	9,556	1869	Company	Wilson Pond.
91	108	Auburn . . .	New York . . .	21,924	1864	Company	Owasco Lake.
93	138	Augusta . . .	Georgia . . . .	21,891	1828 and 1861	City . . .	Savannah Riv.
251		Augusta . . .	Maine . . . . .	8,666	1873	Company	Surface water.
654	386	Austin . . .	Nevada . . . .	1,679	1865	Company	Tunnel in Mountain.
199		Austin . . .	Texas . . . . .	10,960	1876	Company	Colorado River.
660	166	Avon . . . .	New York . . .	1,617	1857	Company	Springs.
534		Ballston Spa	New York . . .	3,011		Village .	
7	7	Baltimore . .	Maryland . . .	313,190	1804 and 1880	City . . .	Jones' Falls and Gun- powder Rivers.
131	92	Bangor . . .	Maine . . . . .	16,856	1875	City . . .	Penobscot Riv.
404	186	Batavia . . .	New York . . .	4,846	1865	Company	Tonawanda Cr.
102	37	Bay City . . .	Michigan . . .	20,693	1872	City . . .	Saginaw Bay.
229		Bayonne . . .	New Jersey . .	9,372			Supplied from Jersey City.
384	99	Beaver Falls	Pennsylvania.	5,104	1875	Company	Beaver River.
611	101	Bedford . . .	Pennsylvania.	2,011	1872-6	Town . .	Springs.
271	102	Bellaire . . .	Ohio . . . . .	8,025	1872	City . . .	Ohio River.
533		Bellefonte . .	Pennsylvania.	3,015	1823	Town . .	Springs.
672		Bellevue . . .	Ohio . . . . .	1,432		Town . .	
592	308	Bellows Falls	Vermont . . . .	2,229	1848	Village .	Springs.
641	357	Belvidere . .	New Jersey . .	1,773	1878	Company	Delaware Riv.
636		Benicia . . .	California . . .	1,794	no	returns	
659		Berthier . . .	Quebec . . . .	1,620	no	returns	
603	267	Berwick . . .	Pennsylvania.	2,095	1848	Company	Spring.



No.	Mode of Supply.	Builders of Pumping Machinery.	Cost of Works.	Bonded Debt.	Rate of Interest	Officers of Works.
678	Gravity . . .		\$89,000	not given		S. L. Wiley, Pres. J. B. Cordary, Sup.
52	Pump direct	Holly Man. Co.	344,000	not given		W. G. Richards, Sup.
481	Pump direct	Holly Man. Co.		no returns		R. G. Phelps, Pres. L. Young, Sec.
365	Pump to stand- pipe.	H. R. Worthington		no returns		
598				no returns		Samuel Clark, Chn.
615	Gravity . . .			not given		M. S. Frost, Pres. H. W. Frost, Sec.
197	Pump to tank	Geo. F. Blake, H. R. Worthington.	82,000	\$61,000	7	L. Z. Carpenter, Reg.
227	Gravity. Pump direct and pump to tank.	H. R. Worthington	150,000	none		N. J. Jordan, Treas.
91	Pump direct	Holly Man. Co.	300,000			A. G. Beardsley, P. N. B. Eldred, S. & T.
93	Pump direct and pump to tank.	I. P. Morris & Co.*	361,432			A. H. Davidson, Sup. and Engineer.
251	Gravity . . .		30,000		no	returns
654	Gravity . . .		20,000			H. H. Allen, Sec. • Wm. Foster, Agent
199	Pump to res. and pump direct.	Holly Man. Co.	95,000			W. D. Mather, Pres.
660	Gravity . . .		18,000			S. Hosmer, Sup.
534	Gravity . . .			no returns		J. Griffin, Pres. Henry White, Sup.
7	Gravity and pump to reservoir.	H. R. Worthington	10,197,267	9,000,000	5-6	R. K. Martin, C. E. J. Curran, W. Eng.
131	Pump direct	Holly Man. Co.	500,000			F. E. Sparke, Sup.
404	Pump to tank and pump direct.	La France Man. Co.* Holly Man. Co.		not given		D. A. McDonald, Owner.
102	Pump direct	Holly Man. Co.	365,658	377,000	8	E. L. Dunbar, Sup.
229				no returns		
384	Pump direct	Holly Man. Co.	30,000			W. H. Chandley, Sup.
611	Gravity . . .		34,000			G. C. Hawkins, Sup.
271	Pump to res.	A. J. Sweeney & Son* Hobbs, Taylor & Co.	112,000			H. G. Wilson, S. & S.
533	Pump to res.	Knowles Man. Co.	100,000			G. Rogers, Sup.
672	Pump to stand- pipe.	Knowles Man. Co.		no returns		J. U. Mayne, Sup.
592	Gravity . . .		60,000	47,000	6-5	F. H. Brown, Sup.
641	Pump to stand- pipe.	Geo. F. Blake.	65,000	50,000		unknown
636				no returns		
659				no returns		
603	Pump to res.		8,000	none		S. B. Bowman, Sup.



## BET--BRO.

No. in Sta- tistics	No. in His- tory.	Name of Town.	State or Province.	Population, 1880.	Date of Construction of Works.	By whom owned.	Source of Supply
642	233	Bethel . . .	Connecticut .	1,767	1878	Borough.	Surface water.
380	289	Bethlehem .	Pennsylvania	5,193	1754	Borough	Spring.
276		Beverly . .	Massachusetts	7,865			Supplied from Salem.
174		Biddeford .	Maine . . . .	12,652		Company	Saco River.
488	249	Big Rapids .	Michigan . .	3,552	1871	City . . .	Muskegan Riv.
126	73	Binghamton	New York . .	17,315	1868	City . . .	Wells and Susque- hanna River.
524	98	Birmingham	Alabama . . .	3,086	1873	Company	Village Creek.
602	97	Birmingham	Connecticut .	2,103	1860	Company	Surface water.
692	283	Blairsville .	Pennsylvania	1,162	1872	Borough	Conemaugh Cr.
127	149	Bloomington .	Illinois . . . .	17,180	1875	City . . .	Ground water.
479	268	Bloomsburg	Pennsylvania	3,702	1880	Company	Fishing Creek.
554		Bodie . . .	California . .	2,712		Company	Mine water.
433	278	Bordentown	New Jersey .	4,258	1856	Company	Delaware River.
5	5	Boston . . .	Massachusetts	362,839	1848 1878 1864	City . . .	Lake Cochituate, Sudbury River, Mystic Lake.
525	302	Boulder . .	Colorado . . .	3,069	1875	City . . .	Boulder Creek.
383	413	Bowling Green	Kentucky . .	5,114	1868	Town . .	Barren River.
700		Boyerstown	Pennsylvania	1,099	no	returns	
234	293	Bradford . .	Pennsylvania	9,197	1877	Company	Tununguant Creek.
538	442	Brampton .	Ontario . . .	2,920	1882	Town . .	Snells Lake.
507		Brandon . .	Vermont . . .	3,280		Fire Dist.	
225	385	Brantford .	Ontario . . .	9,616	1870	City . . .	Creek.
421		Brattleboro	Vermont . . .	4,471		Company	
496		Brazil . . .	Indiana . . .	3,441		Town . .	
78	471	Bridgeport .	Connecticut .	27,643	1818 1857	Company	Surface water.
248	170	Bridgeton .	New Jersey .	8,722	1877	City . . .	East Lake.
375	288	Bristol . . .	Pennsylvania	5,273	1875	Company	Delaware River.
158	482	Brockton .	Massachusetts	13,608	1870 1881	City . . .	Surface water.
269	360	Brookline .	Massachusetts	8,053	1875	City . . .	Ground water.
3	3	Brooklyn .	New York . .	566,663	1860	City . . .	Surface water.



No.	Mode of Supply.	Builders of Pumping Machinery.	Cost of Works.	Bonded Debt.	Rate of Interest	Officers of Works.
642	Gravity . . .		\$ 28,000	\$ 25,000	6	E. W. Gilbert, S. & S.
380	Pump to tank	A. S. Cameron, Bush & Muhlenburg	30,000	38,000	4¾	Charles Bodder, Sup.
276						
174	For fire protection.		no returns			
488	Pump direct	Holly Man. Co., Geo. F. Blake.	80,000			Geo. H. Lincoln, Sup
126	Pump direct	Holly Man. Co.	200,000	191,000		Darwin Felter, Sup.
524	Pump to res.	H. R. Worthington	66,500			W. J. Milner, Sec. & S
602	Gravity . . .		60,000			C. H. Nettleton, Sup.
692	Pump to res.		25,000	19,350	6	John Bruce, Sup. & C
127	Pump to stand-pipe.	H. R. Worthington	122,000	75,000	8	M. X. Chuse, Sup.
479	Pump to res.	H. P. M. Birkinbine	37,000	6,000	5	F. P. Bilmyer, S'c & T E. Jacoby, Sup.
554	Pump . . .		no returns			F. A. Read, Sup.
433	Pump to res.	H. R. Worthington	40,000			John M. Steele, Sup.
	Gravity . . .		16,943,864	11,631,274	6	H. M. Wightman, C. E. E. R. Jones, D. Fitzgerald, R. Cutts, Sups.
5	Pump to res.	H. R. Worthington	1,634,109	1,127,000	6	
525	Gravity . . .		47,500	30,000 17,500	10 8	Samuel Piper, Sup.
383	Pump to res.	H. R. Worthington	100,000	85,000	6	Jas. Witherson, Sup.
700			no returns			
234	Pump direct	A. S. Cameron.	25,000	none		S. W. Vandersaal, Sec.
538	Gravity . . .		58,000	58,000	5	M. M. Elliot, Chn.
507	Gravity . . .		no returns			C. Riggs, H. Rorst, Commissioners.
225	Pump to tank and Pump direct.	H. R. Worthington, Watrous & Co.	48,000	none		T. S. Shenston, S. & T.
421	Gravity . . .		no returns			Several small Co.'s
496	Pump . . .	Dean Bros.*	no returns			Mayor of City.
78	Gravity and pump to reservoir.		500,000	not given		Geo. Richardson, Sup.
248	Pump to res.	H. R. Worthington	79,070	76,500	6	T. Woodruff, Sup.
375	Pump to stand-pipe.	H. R. Worthington	44,000	none		A. K. Joyce, Sup. G. M. Dorrance, Clerk
158	Gravity . . .		203,915	200,000	4-5-6	W. W Cross, Chn.
269	Pump to res.	H. R. Worthington	621,530	593,000	4½ 7	F. F. Forbes, Sup.
3	Pump to res.	Woodruff & Beach, Hubbard & Whit- taker, W. E. Worthen J. F. Loretz.	11,530,500	9,830,500	6	R. Van Buren, Ch. En.



No. in Sta- tistics	No. in His- tory.	Name of Town.	State or Province.	Population, 1880.	Date of Construction of Works.	By whom owned.	Source of Supply.
759		Bryn Mawr .	Pennsylvania	no returns			
14	12	Buffalo . . .	New York . .	155,134	1852	City . . .	Niagara River.
110	78	Burlington .	Iowa . . . . .	19,450	1877	Company	Mississippi Riv.
340	179	Burlington .	New Jersey .	6,090	1804	City . .	Delaware River.
192	443	Burlington .	Vermont . . .	11,365	1867	City . .	Lake Champlain
518		Butler . . .	Pennsylvania.	3,163		Company	
501		Butte . . .	Montana . .	3,364	1882	Company	
594		Cadillac . .	Michigan . .	2,213	no returns		
34	28	Cambridge .	Massachusetts	52,669	1855	City . .	Fresh Pond.
47	390	Camden . .	New Jersey .	41,659	1850	City . .	Delaware River.
728		Campbellsville	Kentucky . .	760	1882	no returns	
733	425	Canaan . .	Connecticut .	700	1879	Company	Springs.
610	177	Canajoharie	New York . .	2,013	1852	Company	Springs.
729		Candelaria .	Nevada . . .	756	no returns		
666	355	Canon City	Colorado . .	1,501	1880	Company	Ground water.
177		Canton . .	Ohio . . . . .	12,258	1869	City . .	Surface water.
651		Cape May .	New Jersey .	1,699		Company	
279	196	Carbondale	Pennsylvania.	7,714	1868	Company	Surface water.
395		Carleton . .	New Brunswick	5,000	no returns		
336	409	Carlisle . .	Pennsylvania	6,209	1854	Company	Conodguinnet Creek.
435		Carson City	Nevada . . .	4,229	no returns		
444	389	Carthage . .	Missouri . . .	4,167	1882	Company	Spring River.
526	376	Catasauqua	Pennsylvania	3,065	1842	Company	Lehigh River.
428		Catskill . .	New York . .	4,320	in progress		
217	284	Cedar Rapids	Iowa . . . . .	10,104	1875	Company	Cedar River.
560		Central City	Colorado . .	2,626	no returns		
155	75	Central Falls	Rhode Island	13,765			Supplied from Paw- tucket.
311		Chambersburg	Pennsylvania.	6,877	1876	Town . .	
366	373	Chambersburg	New Jersey .	5,437			Supplied from Tren- ton.
540	452	Charleston .	Illinois . . .	2,867	1876	City . .	Embarras River.



No.	Mode of Supply.	Builders of Pumping Machinery.	Cost of Works.	Bonded Debt.	Rate of Interest	Officers of Works.
759	no returns					
14	Pump to stand- pipe.	Sheppard Iron Wks* Holly Man. Co., H. R. Worthington.	\$3,308,031	\$2,950,000		Louis H. Knapp, Sup. L. P. Richert, Sec.
110	Pump direct	Holly Man. Co.	235,969	200,000		Ira A. Holly, Sup. Wm. A. Torrey, Sec.
340	Pump to tank	H. R. Worthington	64,600	59,000	6-7	Henry S. Haines, Sup. and Treas.
192	Pump to res.	H. R. Worthington	440,000	439,900	5-6	A. Adsit, Sup.
518	Pump . . .		no returns			W. M. Meredith, Man.
501	Gravity . . .		no returns			
594	no returns					
34	Pump to stand- pipe and reservoir	H. R. Worthington	1,728,655	1,478,500		Hiram Nevons, Sup. J. W. Cotton, Reg.
47	Pump to res.	I. P. Morris.	not given	400,000	7	W. D. Middleton, Sup.
728	no returns					
733	Gravity . . .		7,250	none		Fred'k Watson, Sup.
610	Gravity . . .		12,500	2,500	5-6	L. B. Clark, S'c. & Sup.
729	no returns					
666	Pump to reservoir and pump direct.		75,000	20,000	8	O. G. Stanley, Sup.
177	Gravity and pump direct.	Holly Man. Co. H. R. Worthington.				no returns
651	no returns					
279	Gravity . . .		20,400			L. Egerton, Sec. J. Van Bergen, Sup.
395	no returns					
336	Pump to res.	F. Gardner. Dean Bros.		25,000	6	J. G. Heiser, Sec. & S.
435	no returns					
444	Pump to stand- pipe.	Knowles Man. Co.	65,000	50,000		D. S. Thomas, Pres. C. L. Bartlett, Sec.
526	Pump to stand- pipe.		50,000			Joseph Hunt, Sup.
428	in progress					
217	Pump direct	McGowan	66,000	65,000		F. O. Weeks, Treas. C. J. Fox, Sup & Eng.
560	no returns					
155						
311	Pump to reservoir and pump direct.		not given			A. C. McGrath, Sup.
366						
540	Pump direct	Dean Bros.	47,500	30,000	10	A. F. Walker, Sup.



No. in Sta- tistics	No. in His- tory.	Name of Town.	State or Province.	Population, 1880.	Date of Construction of Works.	By whom owned.	Source of Supply.
39	51	Charleston .	S. Carolina .	49,984	1876	Company	Artesian well.
190	5	Charlestown	Massachusetts	11,514	1866	City . .	Mystic Lake.
300	350	Charlotte . .	N. Carolina .	7,094	1882	Company	Springs.
735	290	Chateaugay .	New York . .	680	1880	Company	Springs.
171	446	Chattanooga	Tennessee . .	12,892	1864	Company	Tennessee River
588		Cheboygan .	Michigan . .	2,269		Town .	
95	253	Chelsea (Boston)	Massachusetts	21,782	1867	City . .	Mystic Lake. .
689	424	Cheshire . .	Massachusetts	1,200	1875	Company	Thunder Brook.
148	93	Chester . .	Pennsylvania	14,997	1867	City . .	Delaware River.
4	4	Chicago . . .	Illinois . . .	503,185	1840	City . .	Lake Michigan.
506		Chico . . .	California . .	3,300		Company	
305	184	Chicopee . .	Massachusetts	7,000	1877	Company	Springs.
760		Chicopee Falls	Massachusetts		no	returns	
200		Chillicothe .	Ohio . . . .	10,938	1882	Company	
8	8	Cincinnati .	Ohio . . . .	255,139	1820	City . .	Ohio River.
410		Claremont .	N. Hampshire	4,704		Company	
726		Clarion . .	Pennsylvania .	769		not given	
466	304	Clarksville .	Tennessee . .	3,860	1879	Company	Cumberland R.
11	11	Cleveland .	Ohio . . . .	160,146	1810	City . .	Lake Erie.
237	129	Clinton . .	Iowa . . . .	9,052	1874	Company	Mississippi Riv.
270	484	Clinton . .	Massachusetts	8,030	1882	Town .	Surface water.
750		Cloverdale .	California . .	430	no	returns	
549	498	Coatesville .	Pennsylvania	2,766	1870	Borough	Springs.
673	461	Cochituate Village	Massachusetts	1,161	1878	Town .	Spring and surface water.
111		Cohoes . .	New York . .	19,418	no	returns	
440		College Point	New York . .	4,192	1874	Village .	Surface water.
436	423	Colorado Springs	Colorado . .	4,229	1878	City . .	Springs and melting snow.
762		Columbia .	California . .		no	returns	
263		Columbia .	Pennsylvania	8,312	no	returns	
218		Columbia .	S. Carolina .	10,040		City . .	Springs and Santee River.



No.	Mode of Supply.	Builders of Pumping Machinery.	Cost of Works,	Bonded Debt.	Rate of Interest	Officers of Works.
39	Pump to stand- pipe.	Knowles Man. Co.	not given	\$300,000	5-6	Z. Davis, Sec. & Tr.
190	Pump to res.	H.R. Worthington				Works owned by Boston.
300	Pump to stand- pipe.		\$100,000	100,000	6	G. Ferris, Sup.
735	Gravity . . .		9,500			J. Hughes, Sup.
171	Pump to res.	Woodward Pump Co	130,000	80,000	7	A. M. Johnson, Pres.
588	Pump . . .	M. Walker.	no returns			G. W. Bell, Chn.
95	Pump to res.	H.R. Worthington	354,211	200,000	6	C. Lombard, Man.
689	Gravity . . .		17,800	none		R. A. Burget, Man.
148	Pump to res.	C. A. Weidner.*	79,000	not given		H. C. Eyre, Sup.
4	Pump to stand- pipe.	Morgan Iron Works, Quintard Iron W'ks, Fort Pitt Foundry.	8,979,523	3,955,000	6-7	D. C. Cregier, City Eng.
506			no returns			
305	Gravity . . .		63,369			W. C. McClallan, P. E. R. Stickney, Clk.
760			no returns			
200	Pump to res.	H.R. Worthington	no returns			W. Poland, Sup.
8	Pump to res.	Harkness, Powell, Shield.	11,140,029			A. G. Moore, Sup.
410	Gravity . . .		no returns			
726			not given			R. B. Thomas, Sup.
466	Pump to stand- pipe.	G. F. Blake Man. Co.	45,000	50,000	6	T. H. Smith, Sup.
11	Pump to res.	Allaire Works. Cuyahoga Co. H. R. Worthington.	3,074,502	1,725,000		H. C. Hawkins, Sec. J. Whitelaw, S. & En.
237	Pump to stand- pipe.	Cope & Maxwell Co.	120,000			O. Messer, Sup.
270	Gravity . . .		225,000	225,000	4	J. W. Corcoran, Sec.
750			no returns			
549	Gravity . . .		42,000	40,000	5	F. F. Davis, Sup.
693	Gravity . . .		29,000	29,000	5	R. Bent, Sup.
111		E. Geyelin.	no returns			
440	Pump . . .	H.R. Worthington	202,000	no returns		
436	Gravity . . .		105,000	99,000	7	M. Parsons, Sup.
762			no returns			
263			no returns			
218	Pump to res.		40,000			



## COL-DAY.

No. in Sta- tistics	No. in His- tory.	Name of Town.	State or Province.	Population. 1880.	Date of Construction of Works.	By whom owned.	Source of Supply.
498	305	Columbia .	Tennessee . .	3,400	1840	City . .	Springs.
216		Columbus .	Georgia . . .	10,123	in progress	Company	Surface water.
407	107	Columbus .	Indiana . . . .	4,813	1870	Town . .	Driftwood River
455	339	Columbus .	Mississippi . .	3,955	1867	City . .	Artesian well.
36	65	Columbus .	Ohio . . . . .	51,647	1870	City . .	Ground water.
640	501	Colusa . . .	California . .	1,779	1870	Company	Sacramento Riv.
459	127	Concord . .	Massachusetts	3,922	1874	Town . .	Sandy Pond.
154	228	Concord . .	New Hampshire	13,836	1872	City . .	Pennacook Lake
491		Conemaugh	Pennsylvania	3,498	no	returns	
793	492	Coney Island	New York . .		1880	Company	Ground water.
510	312	Connersville	Indiana . . . .	3,228	1869	City . .	Canal.
416	106	Conshohocken	Pennsylvania	4,560	1873	Company	Schuylkill River
674	408	Constantine	Michigan . . .	1,405	1878	Village .	Fawn River.
597	487	Cooperstown .	New York . . .	2,199	1835 1879	Company	Otsego Lake.
763		Cornell University	New York . .			University	
562	69	Corning . .	New York . . .	2,623	1870	Company	Monkey Run Creek.
121		Council Bluffs	Iowa . . . . .	18,059	In progress		
72	259	Covington .	Kentucky . . .	29,720	1870	City . .	Licking River.
541	451	Crestline . .	Ohio . . . . .	2,848	1870	City . .	Springs.
687		Crookston .	Minnesota . .	1,227	in progress	Town . .	
205	453	Cumberland	Maryland . . .	10,693	1871	City . .	Potomac River.
208	388	Dallas . . .	Texas . . . . .	10,358	1876	City . .	Trinity River.
187	84	Danbury . .	Connecticut . .	11,669	1860	Borough	Surface water.
483	309	Dansville .	New York . . .	3,625	1874	Village .	Surface water.
321	272	Danvers . .	Massachusetts	6,636	1876	Town . .	Surface water.
262	135	Danville . .	Pennsylvania	8,346	1872-3	Borough	Susquehanna R.
286		Danville . .	Virginia . . .	7,526	1875	Town . .	Dan River.
94	422	Davenport .	Iowa . . . . .	21,834	1874	Company	Mississippi Riv.
50	48	Dayton . .	Ohio . . . . .	38,678	1869-70	City . .	Mad River and Wells.
764		Dayton Soldiers' Home	Ohio . . . . .			no	returns



No.	Mode of Supply.	Builders of Pumping Machinery.	Cost of Works.	Bonded Debt.	Rate of Interest	Officers of Works.
498	Pump to res.	John A. Meisson.	not given			H. Adkinson, Sup.
216	Gravity . . .		in progress			
407	Pump direct	Holly Man. Co.	not given			
455	Pump to res.	Knowles Man. Co.	\$ 3,000			M. A. Hale, Sup.
36	Pump direct	Holly Man. Co.	753,483	\$ 622,000	6	F. Doherty, Sup.
640	Pump to tank	Knowles Man. Co.	24,000	none		H. H. Thomas, S & E
459	Gravity . . .		71,000			W. Buttrick, Sup.
154	Gravity . . .		365,000	350,000	6	C. Hastings, Sup.
491		no returns				
793	Pump to stand- pipe.		100,000	80,000		B. F. Stephens, Sup.
510	Pump direct	Holly Man. Co.	10,000			J. Verden, Sup.
416	Pump to res.	H. R. Worthington	76,000			I. Lukens, T. & Sec.
674	Pump direct		20,500	10,000	5	
597	Pump direct	H. R. Worthington	35,000			J. Bunyan, Sup.
763		no returns				
562	Gravity . . .		40,000	not given		H. C. Heermans, Sup
121		in progress				
72	Pump direct	Holly Man. Co. McGowan Pump Co.	500,000	not given		W. H. Glore, Sup.
541	Gravity . . .		60,000	55,000	5	L. Holcker, Sec. J. Reid, Sup.
687	Pump direct	in progress				K. D. Chase, Sup.
205	Pump direct	Holly Man. Co.	190,000	190,000	6-7	
208	Pump to stand- pipe.	Knowles Man. Co.	85,000	70,000	6	A. M. Wheless, Sup.
187	Gravity . . .		108,405	not given		J. W. Bacon, Sup.
48	Gravity . . .		24,800	10,000	7	J. H. Robbins, Sup.
321	Pump to res.	H. R. Worthington	222,479	205,000	4-5	B. E. Newhall, Sup.
262	Pump direct	Holly Man. Co.	164,691	not given		J. Foster, Sec & Sup.
286	Pump to res.	H. R. Worthington	141,500			
94	Pump direct	Clapp & Jones.	550,000	none		M. Donahue, Pres. W. Moffat, Sec.
50	Pump direct	Holly Man. Co.	786,720	555,000	6-7-8	C. W. Snyder, Sec. J. E. Waltz, City Eng.
764		no returns				



## DEA-ELM.

No. in Sta- tistics	No. in His- tory.	Name of Town.	State or Province.	Population, 1880.	Date of Construction of Works.	By whom owned.	Source of Supply
474		Deadwood .	Dakota . . . .	3,783		Company	
228	162	Decatur . .	Illinois . . . .	9,548	1871	Town . .	Sangamon River
489	457	Decorah . .	Iowa . . . . .	3,529	1881	City . . .	Ground water.
334		Dedham . .	Massachusetts	6,224		Company	
661	303	De Kalb . .	Illinois . . . .	1,598	1876	Village .	Artesian well.
677	190	Delhi . . .	New York . . .	1,384	1872	Company	Surface water.
55	139	Denver . .	Colorado . . .	35,629	1871	Company	South Platte R.
88	119	Des Moines	Iowa . . . . .	22,408	1871	Company	Raccoon River.
19	16	Detroit . .	Michigan . . .	116,340	1827	City . . .	Detroit River.
544	380	Dover . . .	Delaware . . .	2,811	1882	City . . .	Well.
186		Dover . . .	New Hampshire	11,687		3 Companies	
667	310	Downingtown	Pennsylvania .	1,480	1874	Company	Surface water.
606		Doylestown	Pennsylvania .	2,070	1859	Town . .	Springs.
89	140	Dubuque . .	Iowa . . . . .	22,254	1871	Company	Mine tunnel.
295	391	Dunkirk . .	New York . . .	7,248	1871	City . . .	Lake Erie.
382		Dunmore . .	Pennsylvania .	5,151	no	returns	
713	365	Dutch Flat .	California . . .	939	1859	Company	Springs.
429		East Hampton	Massachusetts	4,316	1873	Town . .	Surface water.
361	197	East Liverpool	Ohio . . . . .	5,568	1879	Town . .	Ohio River.
183	412	Easton . . .	Pennsylvania .	11,924	1820	Company	Lehigh River and Delaware River.
261	504	East Orange	New Jersey . .	8,349		Company	Ground Water.
765	75	East Providence	Rhode Island				Supplied from Paw- tucket.
114	141	EastSaginaw	Michigan . . .	19,016	1873	City . . .	Saginaw River.
734	213	East Saugus	Massachusetts	700	1877	City of Lynn	Breed's Pond.
696	219	Ebensburg .	Pennsylvania .	1,123	1874	Borough	Well.
732		Edmore . .	Michigan . . .	704	1881	Town . .	
246		Elgin . . .	Illinois . . . .	8,787	in progress		
76	122	Elizabeth .	New Jersey . .	28,229	1852	Company	Elizabeth River
551	475	Ellenville .	New York . . .	2,750	1870	Company	Surface water.
104	349	Elmira . .	New York . . .	20,541	1861	Company	Carr's Creek.



No.	Mode of Supply.	Builders of Pumping Machinery.	Cost of Works.	Bonded Debt.	Rate of Interest	Officers of Works.
474	Gravity . . .		no returns			S. McMaster, Sup.
228	Pump direct	Holly Man. Co. A. S. Cameron.	\$145,000			G. P. Hardy, Sup.
489	Pump to res.	Knowles Man. Co.	22,484	\$10,000 10,000	6 5	R. B. Tuttle, Chn. W. Com.
334	Pump . . .		no returns			W. M. F. Hill, Sup.
661	Pump to tank		34,000	8,000	8	S. O. Vaughan, City Clerk.
677	Gravity . . .		26,000	none		D. T. Arbuckle, S. & T. J. Middlemist, Sup.
55	Pump direct	Holly Man. Co.	600,000	350,000		J. Archer, Pres. R. R. McCormick, Sec.
88	Pump direct	Holly Man. Co.	388,618			S. VanCleve, Sup. & En
19	Pump to res.	Jackson & Wiley.*	2,750,700	1,652,000	7-6-4	H. Bridge, Sup. J. E. Edwards, Eng.
544	Pump direct	Holly Man. Co.	20,000	20,000	4	Geo. P. Jarrett, Sup.
186	Gravity . . .					no returns
667	Gravity . . .		54,000	4,000	7	J. B. Simes, Pres.
606	Pump to res.	H. R. Worthington	35,000			no returns
89	Gravity . . .		300,000 Capital Stock	none		N. W. Kimball, Sec. Tr. & Gen. Man.
295	Pump direct	Holly Man. Co.	110,000	100,000	7	J. Madigan, Sec. J. C. Richardson, Sup.
382	. . .		no returns			
713	Gravity . . .		5,000	none		I. T. Coffin, Owner.
429	Pump . . .	Fales & Jenks and Valley Machine Co.*	76,000	no returns		For fire purposes.
361	Pump to res.	Cope & Maxwell Co.	40,000			C. Metser, Clk. & Sup.
183	Pump to res.	John West.*	300,000	40,000	6	J. Maxwell, Pres.
261	Pump direct	Holly Man. Co.	105,000			J. M. Randall, Sup.
765						
114	Pump direct	Holly Man. Co.	360,314	350,000		F. E. Hoyt, Sup & Sec
734	Pump to res.		5,500			See Lynn.
696	Pump to res.		16,000	8,200	4	H. J. Evans, Sup.
732	Pump . . .	Dean Bros.				no returns
246		in progress				
76	Pump to res.	L. B. Battin.	500,000			W. Whalen, Sup.
551	Gravity . . .		35,000			G. A. Dudley, Sec.
104	Gravity and pump to reservoir.	La France Man. Co.	345,000			A. Diven, Sup.



## ELP-FRA.

No. in Sta- tistics	No. in His- tory.	Name of Town.	State or Province.	Population, 1880.	Date of Construction of Works.	By whom owned.	Source of Supply.
675		El Paso . .	Illinois . . . . .	1,390		City . .	
730		El Paso . .	Texas . . . . .	736	1882	Company	Rio Grande.
409	313	Elyria . . .	Ohio . . . . .	4,777	1879	Company	Black River.
723		Emaus . . .	Pennsylvania .	847	no	returns	
413	202	Emporia . .	Kansas . . . . .	4,632	1880	City . .	Ground water.
751		Ephrata . .	Pennsylvania .	392	1878	Company	Springs.
77	71	Erie . . . .	Pennsylvania .	27,739	1840	City . .	Lake Erie.
437	231	Eureka . . .	Nevada . . . . .	4,207	1871	Company	Springs.
406	167	Evanston .	Illinois . . . . .	4,820	1874	Town . .	Lake Michigan.
73	392	Evansville .	Indiana . . . . .	29,280	1870	City . .	Ohio River.
683		Evart . . .	Michigan . . . .	1,302	1880	Village .	
445	5	Everett . .	Massachusetts	4,159			Mystic Lake.
739		Fair Haven	New York . . .	621	no	returns	
595	320	Fair Haven	Vermont . . . .	2,211	1880	Village .	Lake fed by Springs.
749		Fairplay . .	Colorado . . . .	450	1883	Town . .	Surface water.
40	29	Fall River .	Massachusetts	48,961	1871	City . .	Watuppa Lake.
555	463	Fargo . . .	Dakota . . . . .	2,693	1880	Company	Red River of the North
528		Farmington	New Hampshire	3,044		Town . .	
492		Fayetteville	North Carolina	3,485		Company	
176	185	Fitchburg .	Massachusetts	12,405	1872	City . .	Scott Brook and Shat- tuck Brook.
282	491	Flatbush . .	New York . . .	7,634	1881	Company	Ground water.
646		Flemington	New Jersey . .	1,751		Company	
273		Flushing . .	New York . . .	8,000		City . .	
486	296	Fort Dodge	Iowa . . . . .	3,586	1881	City . .	Des Moines Riv.
537		Fort Edward	New York . . .	2,988		Company	
752		Fort Snelling	Minnesota . . .	352	1882	no	returns
82	105	Fort Wayne	Indiana . . . . .	26,880	1880	City . .	Surface water.
318		Fort Worth	Texas . . . . .	6,668		Company	
306	314	Frankfort .	Kentucky . . .	6,958	1841	Town . .	Spring.
393		Franklin . .	Pennsylvania .	5,010		Company	Springs.



No.	Mode of Supply.	Builders of Pumping Machinery.	Cost of Works.	Bonded Debt.	Rate of Interest	Officers of Works.
675	Pump . . .		no returns			Dr. Cobb, Sup.
730	Pump to res.		no returns			
409	Pump to tank	H.R.Worthington	not given			F. R. Persons, Sec.
723			no returns			
413	Pump direct	Holly Man. Co.	\$65,000	\$65,000	7	D. Hammond, Sup.
751	Gravity . . .	no returns	3,500			
77	Pump to stand- pipe.	West Engine Co.*	607,311			W. E. Hilton, Sup.
437	Gravity . . .		60,000			G. F. Bliss, Sup.
406	Pump direct	Holly Man. Co.	40,000			J. Ebbert, Sup.
73	Pump direct	Holly Man. Co.	500,000	300,000	7 $\frac{3}{8}$	C. Newman, Sec. B. W. Reynolds, Sup.
683	Pump direct					J. T. Minchin, Chn.
445	Supplied from Boston.					
739			no returns			
595	Gravity . . .		36,500	35,000	5	J. Pottle, Chn. of Board
749	Gravity . . .					in progress
40	Pump to stand- pipe.	H. R. Worthington Boston Machine Co.	1,332,843			A. H. Martine, Sup.
555	Pump direct	Holly Man. Co.	65,143	50,000	7	C. Sweatt, Pres. W. B. Douglass, Sec.
528	Pump to res.		no returns			E. P. Hute, Ch. Eng.
492	Gravity . . .		no returns			W. N. Tillinghast, Sup.
176	Gravity . . .		439,500	400,000	6	T. C. Lovell, Sup.
282	Pump to stand- pipe.		200,000	160,000	6	J. Lott, Sup.
646	Gravity and pump		no returns			J. C. Hopewell, Sup.
273	Pump direct	Holly Man. Co.		no returns		
486	Pump direct	Cope & Maxwell Co.	23,400	23,000		S. T. Meserney, Chn. of the Com.
537	Gravity . . .		no returns			Z. Taylor, Sup.
752			no returns			
82	Pump direct and pump to res.	Holly Man. Co.	310,000	270,000	5-6	W. E. McDermot, Clk
318	Pump direct	Holly Man. Co.	no returns			H. McLaughlin, Sup.
306	Gravity . . .		not given			Samuel J. Shea, Sup.
393	Gravity . . .		no returns			J. L. Hanna, Pres.



## FRE-GRE.

No. in Sta- tistics	No. in His- tory.	Name of Town.	State or Province.	Population, 1880.	Date of Construction of Works.	By whom owned.	Source of Supply.
252	368	Frederick . .	Maryland . .	8,659		City . . .	Surface and spring wa- ter and artesian wells.
394	405	Fredericksburg	Virginia . . .	5,010	1832	Company	Poplar Springs.
335		Frederickton .	New Brunswick	6,218	in progress		
556		Fredonia . .	New York . .	2,692	no returns		
253	469	Freeport . .	Illinois . . . .	8,516	1882	Company	Ground water.
256		Fremont . .	Ohio . . . . .	8,451	in progress		
577	450	Frostburg .	Maryland . .	2,471	1855	Company	Springs.
191		Galesburg .	Illinois . . . .	11,437		Company	
359		Galion . . .	Ohio . . . . .	5,635	no returns		
743	493	Garden City	New York . .	574	1876	Company	Ground water.
396		Gardner . .	Massachusetts	4,988	no returns		
490	419	Geneseo . .	Illinois . . . .	3,522	1882	City . . .	Artesian well.
616		Geneseo . .	New York . .	1,925		Village .	
350	270	Geneva . . .	New York . .	5,878	1879	Company	Springs.
543		Gettysburg	Pennsylvania .	2,814		Company	
658	474	Gilroy . . .	California . .	1,621	1872	Company	Uras Creek and two wells.
401	489	Glens Falls	New York . .	4,900	1872	City . . .	Springs.
370		Gloucester .	New Jersey . .	5,347	in progress		
298	195	Gloversville	New York . .	7,133	1877	Village .	Springs.
539		Golden . . .	Colorado . .	2,916	1878	Town . .	
419	306	Gold Hill . .	Nevada . . . .	4,531			Supplied from Virginia City.
447		Goshen . . .	Indiana . . . .	4,123	no returns		
566	362	Goshen . . .	New York . .	2,557	1871	City . . .	Springs and Surface water.
605	207	Gouverneur	New York . .	2,071	1867	Company	Oswegatchie R.
403		Grand Haven	Michigan . .	4,861		City . .	
63	40	Grand Rapids	Michigan . .	32,016	1875	City . .	Springs and Surface water.
748		Grass Valley	California . .	488	no returns		
553	125	Great Barrington	Massachusetts	2,715	1868	Company	Surface water.
722		Great Falls	New Hampshire	859		Company	
460	183	Greenfield .	Massachusetts	3,903	1870	Town . .	Surface water.



No.	Mode of Supply.	Builders of Pumping Machinery.	Cost of Works.	Bonded Debt.	Rate of Interest	Officers of Works.
252	Gravity . . .		not given	\$70,000	5	G. Ebert, Sup.
394	Gravity . . .		\$25,000			J. W. Sever, Sup.
335	in progress					
556	no returns					
253	Pump to stand- pipe.	Knowles Man. Co.	not given			W. H. J. Stratton, Sup.
256	in progress					
577	Gravity . . .		10,000			W. O. Sprigg, Man.
191	no returns					
359	no returns					
743	Pump direct	Holly Man. Co.	60,000			L. H. Cunliffe, Sup.
396	no returns					
490	Pump direct	Dayton.	7,000	4,000	6	A. White, Sup.
616	Gravity and pump	no returns				M. N. Foster, Pres. of Board.
350	Gravity . . .		not given	35,000	6	A. L. Chew, Sec. S. S. Graves, Sup.
543	Gravity . . .		not given			D. Kendlehart, Sup.
658	Gravity and pump to reservoir.		not given			J. Pettitt, Sup.
401	Gravity . . .		130,000	110,000	7	J. S. Hayes, Sup.
370	in progress					
298	Gravity . . .		83,272	80,000	6	A. W. Berry, Sup.
539	Pump direct	Holly Man. Co.	40,434	36,800		C. W. Lake, Sup.
419						
447	no returns					
566	Gravity . . .		60,000	35,000	5-7	F. D. Suthill, Sup.
605	Pump direct	Holly Man. Co. Bagley & Sewell.*	30,000	none		C. A. Van Duzer, Sup.
403	Pump direct		not given			A. L. Holmes, Sup.
63	Pump to res.	Butterworth & Lowe*	443,319	not given		A. C. Sekell, Sup.
748	no returns					
553	Gravity . . .		20,000			J. L. Dodge, Pres. H. F. Robbins, Sec.
722	Pump . . .	no returns				J. Cumnock, Sup.
460	Gravity . . .		120,000	60,000	5	A. A. Rankin, Sup.



## GRE-HOT.

No. in Sta- tistics	No. in His- tory.	Name of Town.	State or Province.	Population. 1880.	Date of Construction of Works.	By whom owned.	Source of Supply.
712	271	Greenwich .	Connecticut .	942	1880	Company	Surface water.
220	462	Guelph . . .	Ontario . . .	9,890	1879	City . . .	Spring.
719	400	Gunnison .	Colorado . . .	888	1882	Company	Gunnison River.
434		Hackensack	New Jersey .	4,248	1874	Company	Hackensack R.
571	374	Hackettstown	New Jersey .	2,502	1862	Town . .	Springs and Surface water.
323		Hagerstown	Maryland . .	6,627		Company	
53	83	Halifax . . .	Nova Scotia .	36,102	1848	City . . .	Surface water.
519		Hallowell .	Maine . . . . .	3,154		Company	
54	87	Hamilton .	Ontario . . . .	35,961	1861	City . . .	Filter basin on the shore of Lake Ontario.
757	336	Hamilton .	Nevada . . . .	203	1869	Company	Springs.
758		Hamorton .	Pennsylvania .	159	no	returns	
198	214	Hannibal .	Missouri . . .	11,074	1880	Company	Mississippi Riv.
695	321	Hanover . .	New Hampshire	1,134	1821	Company	Springs.
583	322	Hanover . .	Pennsylvania .	2,317	1874	Company	Springs.
767		Harbor Grace	Newfoundland		no	returns	
66	375	Harrisburg	Pennsylvania .	30,762	1844	City . . .	Susquehanna R.
309		Harrison . .	New Jersey . .	6,898	1882	Company	
46	38	Hartford . .	Connecticut .	42,015	1854	City . . .	Surface water and Connecticut River.
117	486	Haverhill .	Massachusetts	18,472	1801	Company	Spring Ponds.
307		Hazelon . .	Pennsylvania .	6,935		Company	
369	263	Henderson	Kentucky . . .	5,365	1875	City . . .	Ohio River.
420	205	Hingham .	Massachusetts	4,485	1880	Company	Accord Pond.
65		Hoboken . .	New Jersey . .	31,000			Supplied from Hack- ensack.
520	169	Hollidaysburg	Pennsylvania .	3,150	1867	Borough	Roaring Run.
707		Hollister .	California . .	1,034		Company	
670		Holly . . .	Michigan . . .	1,443	1879	Town . .	
92	41	Holyoke . .	Massachusetts	21,915	1873	City . . .	Springs and Surface water.
563		Honesdale	Pennsylvania .	2,620		Company	
266	455	Hornellsville	New York . . .	8,195	1882	Company	Springs.
487	401	Hot Springs	Arkansas . . .	3,554	1882	Company	Surface water.



No.	Mode of Supply.	Builders of Pumping Machinery.	Cost of Works.	Bonded Debt.	Rate of Interest	Officers of Works.
712	Gravity . . .		\$84,000	none		G. G. McHall, Sec. W. B. Ryder, Eng.
220	Pump to tank and pump direct.	Inglis & Hunter.	108,000	\$100,000	6	G. Howard, Chn. W. Com.
719	Pump to tank	H. R. Worthington	200,000	150,000	7	D. J. McCann, Sup.
434	Pump to res.	H. R. Worthington, Stevens, Carr.	no returns			
571	Gravity . . .		54,000	54,000	5-7	W. Osmun, Sec. I. Crane, Sup.
323	Gravity . . .	no returns				G. Hamilton, Pres.
53	Gravity . . .		741,000	not given		E. H. Keating, Ch. Eng
519	Gravity and pump	no returns				O. Currier, Sup.
54	Pump to res.	A. Gartshore *	1,280,000	991,878		W. Haskins, Man.
757	Pump to res.	A. S. Cameron.	380,000	not given		S. Liddle, Eng. & Sup.
758		no returns				
198	Pump to res.	G. F. Blake Man. Co.	102,714	90,000	7	J. H. Decker, Eng. and Man.
695	Gravity . . .		12,000			
583	Gravity . . .		38,000	none		S. Keefer, Pres. R. M. Wirt, Sec.
767		no returns				
66	Pump to res.	H. R. Worthington	600,000	551,000	6	J. H. Weitmyer, Sup.
309	Pump . . .		in progress			E. Pierson, Man.
46	Gravity. Pumping	Hartford Foundry & Machine Co.	1,512,362	1,002,000		S. Nott, Sup. Eng. J. Seymour Chase, Sec
117	Gravity and pump to tank.	H. R. Worthington	300,000	65,000		C. W. Morse, Sup.
307	Gravity and pump	no returns				D. Clark, Sup.
369	Pump to res.	G. B. Allen & Co.	125,000	100,000 13,500	6 5	F. Kliederer, Sec & Tr G. M. Alves, C. E.
420	Gravity . . .		118,000			C. W. S. Seymour, Sup
65		no returns				
520	Gravity . . .		73,000			
707		no returns				
670	Pump . . .	Perkins.	10,093			E. D. Busey, Clerk.
92	Gravity . . .		336,446	250,000	6	J. D. Hardy, Sup. E. M. Bolton, Reg.
563	Gravity . . .		not given			F. D. Thayer, Sup.
266	Gravity . . .		200,000	150,000	6	S. H. Crane, Sec. & Tr A. W. Inman, Sup.
487	Pump to res.	H. R. Worthington	not given			H. W. Morphy, Sec. J. H. McGlashen, Sup



## HOU-KEN.

No. in Sta- tistics	No. in His- tory.	Name of Town.	State or Province.	Population, 1880.	Date of Construction of Works.	By whom owned.	Source of Supply.
134	359	Houston . .	Texas . . . . .	16,513	1878	Company	Buffalo Bayou.
250	42	Hudson . .	New York . .	8,670	1875	City . . .	Hudson River.
397		Huntsville .	Alabama . . .	4,977	1825	City . . .	Spring.
141		Hyde Park .	Illinois . . . .	15,716	no	returns	
753	431	Hyde Park .	Vermont . . . .	331	1850	Company	Springs.
26	22	Indianapolis	Indiana . . . .	75,056	1869	Company	White River.
442	203	Ionia . . . .	Michigan . . .	4,190	1876	City . . .	Springs and Surface water.
299		Iowa City .	Iowa . . . . .	7,123		Company	
245	164	Ironton . .	Ohio . . . . .	8,857	1870	City . . .	Ohio River.
344		Ishpeming .	Michigan . . .	6,039	no	returns	
741		Ithaca . . .	Michigan . . .	600		Town . .	Artesian well.
235	435	Ithaca . . .	New York . . .	9,105	1872	Company	Surface water.
137	150	Jackson . .	Michigan . . .	16,105	1870	City . . .	Artesian wells.
720		Jacksonville	Alabama . . . .	882		Town . .	
281	110	Jacksonville	Florida . . . .	7,650	1880	City . . .	Ground water.
202	111	Jacksonville	Illinois . . . .	10,927	1873	City . . .	Surface water.
230	411	Jamestown .	New York . . .	9,357	1882	Company	Ground water.
231		Jeffersonville	Indiana . . . .	9,357	in	progress	
18	20	Jersey City	New Jersey . .	120,722	1852	City . . .	Passaic River.
392	80	Johnstown .	New York . . .	5,013	1878	Town . .	Surface water.
259		Johnstown .	Pennsylvania .	8,380		Company	Surface and Spring water.
189		Joliet . . . .	Illinois . . . .	11,657	no	returns	
580		Joliette . . .	Quebec . . . .	3,268	no	returns	
353	318	Joplin . . .	Missouri . . . .	7,038	1881	Company	Shoal Creek.
268	56	Kalamazoo	Michigan . . . .	8,057	1869	City . . .	Ground water.
33	27	Kansas City	Missouri . . . .	55,785	1873	Company	Kansas River.
316	132	Keene . . .	New Hampshire	6,784	1874	City . . .	Surface water.
708		Kennett Square	Pennsylvania . .	1,021	1842 and 1865	Borough	Surface water.
389	226	Kenosha . .	Wisconsin . . .	5,039	1879	Company	Artesian well.
456	456	Kenton . .	Ohio . . . . .	3,940	1881	Company	Ground water.



No.	Mode of Supply.	Builders of Pumping Machinery.	Cost of Works.	Bonded Debt.	Rate of Interest	Officers of Works.
134	Pump direct	H. R. Worthington	not given			
250	Pump to res.	Clapp & Jones.	\$260,977			P. Miller, Sec. J. S. Ray, Sup.
397	Pump . . .	H. R. Worthington. M. Webster.	50,000	no returns		T. W. White, Mayor.
141						
	no returns					
753	Gravity . . .		3,000			C. S. Page, Sec. & Tr. A. P. Smalley, G. Man.
26	Pump direct	Holly Man. Co.	1,200,000	\$500,000	6	S. M. Dyer, Vice-Pres. F. A. W. Davis, Tr.
442	Gravity . . .		17,000	none		F. C. Sibley, Sup.
299	Pump direct	Holly Man. Co.		no returns		T. Cornell, Sup.
245	Pump direct	Holly Man. Co.	160,000			E. Lawton, Sup.
344	Pump . . .	H. R. Worthington		no returns		
741						
	no returns					
235	Gravity . . .		156,000	\$56,000	6	L. Treman, Pres. E. M. Treman, Sec.
137	Pump direct	Holly Man. Co.	180,000	140,000 23,500	8 10	J. Anderson Sup.
720	Gravity . . .					
	no returns					
281	Pump to stand- pipe.	H. R. Worthington	98,000			R. N. Ellis, Sup.
202	Pump to res.	Charles B. Hardick,* H. R. Worthington.	159,000			D. O. Fry, Sup.
230	Pump direct	Holly Man. Co.	140,000	100,000	6	A. F. Kent, Tr. & Sup.
231						
	in progress					
18	Pump to res.	H. R. Worthington	4,950,000	4,838,000		W. W. C. Sites, Ch. Eng.
392	Gravity . . .		59,806	60,500		
259	Gravity . . .					
	no returns					
189						
	no returns					
580						
	no returns					
353	Pump to res.	Smith, Vaile & Co.	124,000	75,000	7	C. J. Lewis, Sup. L. P. Cunningham, Sec. G. H. Chandler, Ch. Eng.
268	Pump direct	Holly Man. Co. H. R. Worthington.	not given			
33	Pump direct	Holly Man. Co.	not given			B. F. Jones, Sup.
316	Gravity . . .		162,700	150,400		D. H. Sawyer, Sup.
708	Pump . . .					
	no returns					
389	Gravity . . .		25,000	none		E. G. Hazelton, Sup.
456	Pump direct	Holly Man. Co.	58,217	40,000	6	E. V. Boulton, Man.



## KEO-LIN.

No. in Sta- tistics	No. in His- tory.	Name of Town.	State or Province.	Population, 1880.	Date of Construction of Works.	By whom owned.	Source of Supply.
180	174	Keokuk . .	Iowa . . . . .	12,117	1878	Company	Mississippi R.
664		Kingston . .	Massachusetts	1,524	no	returns	
152	403	Kingston . .	Ontario . . . .	14,091	1849	Company	Lake Ontario.
561		Kittanning .	Pennsylvania .	2,624	1871	Company	Allegheny Riv.
222		Knoxville .	Tennessee . .	9,693	in progress	Company	
151	444	La Crosse .	Wisconsin . .	14,505	1877	City . . .	Mississippi Riv.
149	257	Lafayette .	Indiana . . . .	14,860	1876	City . . .	Wabash River.
118	262	Lake . . . .	Illinois . . . .	18,380	1874	Town . .	Lake Michigan.
768		Lake Valley	New Mexico .		1882	Company	
324		Lakeview .	Illinois . . . .	6,565		Town . .	
443	60	Lambertville	New Jersey . .	4,183	1878	Company	Surface water.
315	342	Lancaster .	Ohio . . . . .	6,803	1877	City . . .	Ground water.
85	393	Lancaster .	Pennsylvania .	25,769	1836	City . . .	Conestoga Creek
596		Lansford . .	Pennsylvania .	2,206	no	returns	
337		Laporte . .	Indiana . . . .	6,195		Town . .	
347	429	Las Vegas .	New Mexico .	6,000	1882	Company	Gallinas River.
49	35	Lawrence .	Massachusetts	39,151	1873	City . . .	Merrimack Riv.
150	156	Leadville .	Colorado . . .	14,820	1879	Company	Surface water.
133	476	Leavenworth	Kansas . . . .	16,546	1882	Company	Missouri River.
247	193	Lebanon . .	Pennsylvania .	8,778	1872	Borough .	Springs.
458	381	Lee . . . . .	Massachusetts	3,930	1881	Company	Surface water.
354	307	Leominster	Massachusetts	5,772	1873	Town . .	Surface water.
736	211	Lenox . . .	Massachusetts	664	1875	Company	Springs.
668	286	Leroy . . .	New York . . .	1,468	1875	Village .	Oatka Creek.
112	406	Lewiston . .	Maine . . . . .	19,083	1878	City . . .	Androscoggin Riv.
512		Lewistown .	Pennsylvania .	3,222		Company	
547	479	Lexington .	Virginia . . . .	2,771	1832	Town . .	Spring.
717	158	Lincoln . .	Massachusetts	907	1875	Town . .	Sandy Pond.
169		Lincoln . .	Nebraska . . .	13,003	in progress		
386		Lindsay . .	Ontario . . . .	5,080	1874	City . . .	Scugog River.



No.	Mode of Supply.	Builders of Pumping Machinery.	Cost of Works.	Bonded Debt.	Rate of Interest	Officers of Works.
180	Pump direct	Holly Man. Co. H. R. Worthington.	\$102,000			W. C. Stripe, Sec.
664	no returns					
152	Pump to res.		160,000	none		J. Wilson, Sup.
561	Pump . . .	Thompson, Epping & Carpenter.	no returns			
222	Pump to res.		no returns			S. E. Cook, Sup.
151	Pump direct	G. F. Blake Man. Co	90,000			J. Manchester, Sup.
149	Pump to res.	Clapp & Jones.	266,683	\$300,000	8	R. B. Wallace, Sup.
118	Pump direct	Holly Man. Co.	1,000,000	237,000		J. T. Foster, Sup.
768	no returns					
324	Pump direct	Am. W. W. Co.	no returns			
443	Gravity . . .		20,000			M. Coryell, Eng. & Sup.
315	Pump to stand- pipe.	H. R. Worthington	46,801	25,000		A. Bauman, Sec. & Sup.
85	Pump to res.	H. P. M. Birkinbine, H. R. Worthington.	300,000	not given		J. T. Macgonigle, Chn.
596	no returns					W. D. Zehner, Sup.
337	Pump . . .	Holly Man. Co.	no returns			J. Hay, Sup.
347	Gravity . . .		110,000			W. S. Smith, Sup.
49	Pump to res.	I. P. Morris Co.	1,371,565	1,300,000	6	H. W. Rogers, Sup. G. A. Durrell, Reg.
150	Gravity . . .		300,000	65,000	8	H. W. Lake, Sec., Tr. and Sup.
133	Pump to res.	Gt. Western F'dry.	300,000	250,000	6	D. M. Swan, Sec.
247	Gravity . . .		300,000	250,000	7	H. M. Allwein, Sup.
458	Gravity . . .		30,000			M. H. Pease, Sec. & Tr
354	Gravity . . .		266,552	160,000	7-6	J. G. Tenney, Tr & Sup
736	Gravity . . .		25,000			W. D. Curtis, Tr & Man
668	Pump direct	La France Man. Co.	not given			
112	Pump to res.	H. R. Worthington	500,000	474,000	5	John Reed, Sup. E. A. Nash, Clk.
512	Gravity and pump to reservoir.	H. R. Worthington	no returns			
547	Gravity . . .		unknown			J. B. Holmes, Sup.
717	Pump to res.	H. R. Worthington	33,000	30,000		J. L. Chapin, Sup.
169	in progress					
386	Pump direct		not given			



## LIT-MAN.

No. in Sta- tistics	No. in His- tory.	Name of Town.	State or Province.	Population, 1880.	Date of Construction of Works.	By whom owned.	Source of Supply.
426	277	Litchfield .	Illinois . . . .	4,326	1873	City . . .	Surface water.
166	477	Little Rock	Arkansas . . .	13,138	1878	Company	Arkansas River.
351	316	Lockhaven	Pennsylvania .	5,845	1869	City . . .	Surface water.
160	163	Lockport .	New York . . .	13,522	1868	City . . .	Erie Canal.
499	225	Logan City	Utah . . . . .	3,396	1878	City . . .	Logan River.
195	223	Logansport	Indiana . . .	11,198	1876	City . . .	Eel River.
107	61	London . .	Ontario . . . .	19,746	1878	City . . .	Springs.
469		Long Branch	New Jersey . .	3,833	1877	Company	Springs and Surface water.
129		Long Island City	New York . . .	17,129		City . . .	Ground water.
725	437	Longmont .	Colorado . . .	773	1882	Town . .	St. Vrain River.
769		Longueuil .	Quebec . . . .		no	returns	
196	418	Los Angeles	California . . .	11,183	1862	Company	Los Angeles R.
612	198	Louella . .	Pennsylvania .	2,000	1869	Company	Ithan Creek.
17	15	Louisville .	Kentucky . . .	123,758	1860	Company	Ohio River.
30	24	Lowell . . .	Massachusetts	59,475	1870	City . . .	Merrimack Riv.
441	465	Ludington .	Michigan . . .	4,190	1882	Company	Pere Marquette River.
139	89	Lynchburg	Virginia . . . .	15,959	1811	Town . .	James River.
51	39	Lynn . . . .	Massachusetts	38,274	1869	City . . .	Breeds Pond.
449	130	Lyons . . .	Iowa . . . . .	4,095	1876	Company	Mississippi Riv.
770		Lyons . . .	Michigan . . .		no	returns.	
471	244	Lyons . . .	New York . . .	3,820	1873	Company	Ground water.
265	458	McKeesport	Pennsylvania .	8,212	1882	Borough	Ground water.
172	394	Macon . . .	Georgia . . . .	12,749	1881	Company	Springs.
242	330	Madison . .	Indiana . . . .	8,945	1849	City . . .	Springs, Surface water and Ohio River.
210	508	Madison . .	Wisconsin . . .	10,324	1882	City . . .	Artesian wells.
297	201	Mahanoy City	Pennsylvania .	7,181	1864	Company	Springs and Surface water.
182	343	Malden . .	Massachusetts	12,017	1870	Town . .	Spot Pond.
439	204	Malone . .	New York . . .	4,193	1857	Company	Springs.
61	36	Manchester	New Hampshire	32,630	1872	City . . .	Lake Massabesic
308		Manistee . .	Michigan . . .	6,930	In progress		



No.	Mode of Supply.	Builders of Pumping Machinery.	Cost of Works.	Bonded Debt.	Rate of Interest	Officers of Works.
426	Pump direct	Holly Man. Co. H. R. Worthington.	\$96,500	\$50,000	8	G. W. Jones, City Clk.
166	Pump to standpipe and pump direct.	Geo. F. Blake.	not given			Zeb. Ward, Owner.
351	Gravity . . .		130,000	70,000	6	E. A. McGill, Sup.
160	Pump direct	Holly Man. Co.	not given			Geo. H. Drake, Sup.
499	Gravity . . .		13,000	none		J. Adams, Sup.
195	Pump direct	Cope & Maxwell.	132,000	172,000	8	W. H. Schrier, Sup.
107	Pump to res.	Killey & Co.	390,000			T. H. Tracy, Eng. J. Danks, Sec.
469	Pump to stand- pipe.	H. R. Worthington	no returns			
129	Pump direct	Holly Man. Co.	no returns			
725	Gravity . . .		65,000	20,000	8	Trustees of the Town
769			no returns			
196	Gravity . . .		425,000	95,000	7	Fred. Eaton, C. E., Sup. and Eng. Geo. W. Childs, Own. Benj. F. Slaw, Man. Chas. Hermany, C. E., Eng. and Sup.
612	Pump to res.	H. R. Worthington	20,000			
17	Pump to stand- pipe and reservoir	Dennis Long & Co.	5,631,864			
30	Pump to res.	H. R. Worthington, H. G. Morris.	2,289,800	1,875,000	6	H. G. Holden, Sup.
441	Pump direct	M. Walker	30,000			N. J. Gaylord, Sup.
139	Pump to res.	F. B. Dean & Son.	171,102			James Allen, Sup. A. Forsberg, City Eng.
51	Pump to res.	I. P. Morris Co.	1,016,927	921,500		J. W. Lyon, Sup. Frank Davis, Reg.
449	Pump to res.	Knowles Man. Co. Cope & Maxwell Co.	40,000			John Gallion, Sup.
770	Pump direct	Holly Man. Co.	For fire purposes			
471	Pump to res.		4,000			M. V. B. Rowley, Man.
265	Pump to res.	H. R. Worthington	98,304	75,000	5	Joseph Ecoff, Supt.
172	Pump to res.	H. R. Worthington	78,000	75,000	6	A. E. Boardman, Tr. and Sup.
242	Pump to res.		100,000	100,000	8	C. E. Godman, Sup. A. C. Payne, Sec.
210	Pump to stand- pipe.	Knowles Pumps.	100,000	76,000	5	C. B. Davis, Ch. Eng.
297	Gravity . . .		78,500	1,800	6	Edward S. Silliman, Pres.
182	Gravity . . .		629,706	350,000	6	W. W. Hawkes, Sup.
439	Gravity . . .		45,000			Benj. Webster, Sup.
61	Pump to res.	R. D. Wood & Co.	773,841	750,000		Chas. K. Walker, Sup.
308	Pump direct	Holly Man. Co.				G. A. Hart, Sec.



## MAN-MIL.

No. in Sta- tistics	No. in His- tory.	Name of Town.	State or Province.	Population, 1880.	Date of Construction of Works.	By whom owned.	Source of Supply.
362	66	Mankato . .	Minnesota . .	5,550	1879	City . . .	Minnesota Riv.
221	395	Mansfield .	Ohio . . . . .	9,859	1872	City . . .	Springs.
289		Marblehead	Massachusetts	7,467		Town . .	Surface water.
648	276	Marengo . .	Iowa . . . . .	1,738	1874	City . . .	Iowa River.
515	432	Marion . . .	Indiana . . . .	3,182	1877	City . . .	Well.
461		Marion . . .	Ohio . . . . .	3,899	no	returns	
215		Marlborough	Massachusetts	10,127	1882	Town . .	Lake Williams.
411		Marquette .	Michigan . . . .	4,690	1870	City . . .	Lake Superior.
332	72	Marshalltown	Iowa . . . . .	6,240	1877	Town . .	Iowa River.
329	199	Martinsburg	West Virginia	6,335	1873	City . . .	Springs.
427		Marysville .	California . . . .	4,321	no	returns	
312		Massillon .	Ohio . . . . .	6,836	1854	Company	Surface water.
475	168	Mauch Chunk	Pennsylvania . .	3,752	1849	Company	Springs.
378		Maysville .	Kentucky . . . .	5,220		Company	
244	133	Meadville .	Pennsylvania . .	8,860	1875	Company	French Creek.
531		Mechanicsburg	Pennsylvania . .	3,018	no	returns	
285	200	Medford . .	Massachusetts	7,573	1870	Town . .	Spot Pond.
617	447	Media . . .	Pennsylvania . .	1,919	1870	Town . .	Surface water.
417	242	Melrose . .	Massachusetts	4,560	1870	Town . .	Spot Pond.
771		Menlo Park	California . . . .		no	returns	
59	159	Memphis . .	Tennessee . . .	33,592	1872	Company	Wolf River.
565		Menomonee	Wisconsin . . . .	2,589	no	returns	
143	143	Meriden . .	Connecticut . .	15,540	1869	City . . .	Surface water.
291		Michigan City	Indiana . . . . .	7,366		City . . .	
313	237	Middletown	Connecticut . .	6,826	1866	City . . .	Surface water.
418	503	Middletown	Ohio . . . . .	4,538	1872	Village .	Ground water.
254	387	Middletown	New York . . . .	8,494	1867	Village .	Springs and Surface water.
663		Midland . .	Michigan . . . .	1,529	1882	Village .	River.
232	279	Milford . .	Massachusetts	9,310	1881	Company	Charles River.
709		Milford . .	Pennsylvania . .	983		Company	



No.	Mode of Supply.	Builders of Pumping Machinery.	Cost of Works	Bonded Debt.	Rate of Interest	Officers of Works.
362	Pump direct	Knowles Man. Co.	\$16,047			C. A. Chapman, C. E.
221	Pump direct	Holly Man. Co.	192,000	\$95,000	6-8	H. R. Smith, Sec & Tr E. McCoy, Sup.
289	Gravity . . .		For fire protection			Isaac Atkins, Ch. Eng
648	Pump direct	H. R. Worthington	For fire protection			A. J. Morrison, Mayor Samuel Hulley, Sup. B. R. Norman, Clk.
515	Pump direct	Dean Bros.	35,000	20,000		
461	no returns					
215	Pump to reservoir and direct.	Geo. F. Blake.	125,000	125,000	4	Elbridge Howe, Chn.
411	Pump direct	Holly Man. Co.	100,000	not given		unknown John Turner, Chn. of Com.
332	Pump direct	Knowles Man. Co.	106,275			J. M. Shaffer, Eng. and Sup.
329	Pump direct	Holly Man. Co.	85,000	90,000	5	
427	no returns					
312	Gravity . . .	no returns	75,000			unknown
475	Gravity . . .		25,000			R. M. Brodhead, Sup.
378	Gravity . . .	no returns				A. Shaefer, Sup.
244	Pump to res.	Vergennes Machine Co.	145,000			Geo. S. Cullum, Sup. H. L. Richmond, Sec.
531	no returns					
285	Gravity . . .		320,000	300,000	6	R. M. Gow, Sup.
617	Pump to res.	H. R. Worthington. Isaac S. Cassin.	65,000	65,000	4	Chas. Williamson, Chn. of Com.
417	Gravity . . .		176,987	150,000	6	Addison Lane, Sup.
771	no returns					
59	Pump direct	Holly Man. Co.	350,000	100,000	6	T. J. Latham, Pres. W. L. Cameron, Sec.
565	no returns					
143	Gravity . . .		350,000	325,000	7	H. L. Schleiter, Sup. J. Rankauwitz, Sup.
291	Pump . . .	no returns				
313	Gravity . . .		421,243	136,500	6	J. C. Broatch, Sec. & Sup
418	Pump direct	Holly Man. Co.	74,000	68,000	8	A. W. Hill, Ch. Eng.
254	Gravity and pump to reservoir.	Holly Man. Co.	170,000	160,000	6	E. M. Madden, Chn. Sam. Foster, Pres.
663	Pump direct	M. Walker.				C. W. Shippee, Sec. Moses Joy, Jr., Pres.
232	Pump direct	Holly Man. Co.	170,000	60,000	5	Jno. McCarty, Sup.
709	Gravity . . .	no returns				



## MIL-NEV.

No. in Sta- tistics	No. in His- tory.	Name of Town.	State or Province.	Population, 1880.	Date of Construction of Works.	By whom owned.	Source of Supply.
280	216	Millville . .	New Jersey . .	7,660	1878	Company	Well and Maurice Riv.
20	19	Milwaukee .	Wisconsin . .	115,587	1872	City . . .	Lake Michigan.
509		Minersville	Pennsylvania .	3,249		Company	
42	121	Minneapolis	Minnesota . .	46,887	1867	City . . .	Mississippi Riv.
558	326	Mishawaka	Indiana . . . .	2,640	1860	Town . .	St. Joseph River
755	258	Mission San Jose	California . .	246	1870	Company	Springs.
586		Mitchell . .	Ontario . . . .	2,284		no returns	
75		Mobile . . .	Alabama . . . .	29,132		no returns	
653		Modesto . .	California . . .	1,693		Company	
278	273	Moline . . .	Illinois . . . .	7,800	1877	City . . .	Mississippi Riv.
390		Moncton . .	New Brunswick	5,032		no returns	
626	212	Monticello .	Iowa . . . . .	1,877	1879	Town . .	Artesian well.
132	63	Montgomery	Alabama . . . .	16,713	1873	Company	Alabama River.
15	18	Montreal . .	Quebec . . . .	140,747	1801	City . .	St. Lawrence R.
367	220	Morristown	New Jersey . .	5,418	1799	Company	Springs.
579		Mt. Carmel	Pennsylvania .	2,378	1882	no returns	
414	294	Mt. Holly .	New Jersey . .	4,621	1846	Company	Rancocas Creek.
607	116	Mt. Joy . . .	Pennsylvania .	2,058	1873	Town . .	Chiquesalurga Creek.
623		Mt. Morris .	New York . . .	1,899		no returns	
346		Mt. Vernon	New York . . .	6,000	1882	in progress	
376	378	Mt. Vernon	Ohio . . . . .	5,249	1882	City . .	Kokosing River.
264	113	Muscatine .	Iowa . . . . .	8,295	1876	Company	Mississippi Riv.
194		Muskegon .	Michigan . . .	11,264	1875	Town . .	Ground water and Surface water.
476	215	Nantucket .	Massachusetts	3,727	1878	Company	Wannacomet Pond.
161	123	Nashua . . .	New Hampshire	13,397	1855	Company	Pennichuck Brook.
43	154	Nashville .	Tennessee . .	43,350	1832	Town . .	Cumberland R.
255	377	Natick . . .	Massachusetts	8,479	1874	Town . .	Dug Pond.
457		Negaunee .	Michigan . . . .	3,931		Town . .	
621		Nevada . . .	Missouri . . . .	1,913		no returns	
451		Nevada City	California . . .	4,022		Company	



No.	Mode of Supply.	Builders of Pumping Machinery.	Cost of Works.	Bonded Debt.	Rate of Interest	Officers of Works.
280	Pump to stand- pipe.		\$63,000			Jos. McChesney, Sec.
20	Pump to res.	E. P. Allis & Co.	1,851,591	\$1,600,000		G. H. Benzenberg, City Eng.
509	Gravity . . .		no returns			James Murray, Sup.
42	Pump direct	Holly Man. Co., Jas. Waters.	404,237			W. H. Johnson, Sup.
558	Pump direct	"Metzger."	10,000			J. H. Whitson, Pres.
755	Gravity . . .		not given			P. L. Merritt, Sup. and Agent.
586			no returns			
75			no returns			
653	Pump . . .		no returns			S. P. Rogers, Sup.
278	Pump direct		not given			M. A. Gould, Eng. Phil. Keene, Sup.
390			no returns			
626	Pump to res.		16,000	12,000	7	S. Y. Bradstreet, Sup.
132	Pump direct	H. R. Worthington	not given			J. R. Baldwin, Sup.
15	Pump to res.	F. J. McDougall,* W. P. Bartley, E. E. Gilbert, H. R. Worthington.	not given			L. Lesage, Sup. & Eng.
367	Gravity . . .		138,000	50,000	6	H. C. Pitney, Pres. E. Pierson, Sec. & Tr.
579	Pump . . .	H. R. Worthington	no returns			
414	Pump to res.	H. R. Worthington	30,000	none		Henry C. Risdon, Sec.
607	Pump to res.	P. Wimer.*	35,000			Wm. Kuhn, Sup.
623			no returns			
346			in progress			J. S. Wood, Sec.
376	Pump to stand- pipe.	H. R. Worthington	50,000			
264	Pump to res.	Cope & Maxwell Co.	39,500			William Molis, Sup.
194	Pump direct	Vergennes Mach. Co Walker.*	160,000			
476	Pump to tank	H. R. Worthington	30,000			W. F. Codd, Sec & Sup
161	Pump to res.	Lowell Machine Co. Hays & Lang.	225,000			E. Spalding, Pres. H. M. Hobson, Sec & T
43	Pump to res.	Dean Bros. H. R. Worthington.	1,500,000	75,000	6	G. Reyer, Sup.
255	Pump to res.	H. R. Worthington	200,000	171,000	5-6-7	J. W. Morse, Sup.
457	Pump . . .		no returns			A. W. Maitland, Sup.
621			no returns			
451	Gravity . . .		no returns			J. E. Brown, Sup.



## NEW-NOR.

No. in Sta- tistics	No. in His- tory.	Name of Town.	State or Province.	Population, 1880.	Date of Construction of Works.	By whom owned	Source of Supply
136	62	New Albany	Indiana . . . .	16,423	1876	Company	Ohio River.
16	14	Newark . .	New Jersey .	136,508	1800	City . .	Passaic River.
83	59	New Bedford	Massachusetts	26,845	1865	City . .	Acushnet River.
173	239	New Brighton	New York . .	12,679	1880	Company	Ground water.
482	238	New Brighton	Pennsylvania .	3,653	1881	Company	Beaver River.
184	348	New Britain	Connecticut . .	11,800	1858	City . .	Shuttle Meadow Brook.
128	250	New Brunswick	New Jersey . .	17,166	1866	City . .	Lawrence Brook
122	68	Newburgh .	New York . .	18,049	1853	City . .	Washington Lake and Silver Creek.
159		Newburyport	Massachusetts	13,538	no	returns	
745	366	New Carlisle	Indiana . . . .	530	1878	Village .	Ground water.
480	441	New Castle	Delaware . . .	3,700	1870	Company	Christiana Riv.
258	325	New Castle	Pennsylvania .	8,418	1881	Company	Shenango Creek
731		New Hartford	New York . .	710	no	returns	
38	86	New Haven	Connecticut .	62,882	1860	Company	Mill River.
609	315	New Lisbon	Ohio . . . . .	2,028	1842	Town .	Springs.
206	57	New London	Connecticut .	10,537	1802	City . .	Lake Konomoc.
671	317	New Milford	Connecticut .	1,416	1874	Company	Surface water.
10	10	New Orleans	Louisiana . .	216,090	1836	Company	Mississippi Riv.
105	45	Newport . .	Kentucky . .	20,433	1871	City . .	Ohio River.
142	172	Newport . .	Rhode Island	15,693	1875	Company	Easton's Pond.
773		New Sweet Springs	Missouri . . .		no	returns	
130	54	Newton . .	Massachusetts	16,995	1875	City . .	Charles River.
I	I	New York .			1829 1842 1870	City . .	Surface water.
		N. Y. High Service	New York .	1,206,299			
772		New York Reform School, Jamesburg	New York . .			State . .	Ground water.
505	131	Niagara Falls	New York . .	3,320	1877	Company	Niagara River.
582	420	Niagara Falls	Ontario . . . .	2,347	1858	Company	Niagara River.
438	396	Niles . . . .	Michigan . . .	4,197	1878	Company	Berrian Lake.
90	70	Norfolk . .	Virginia . . .	21,966	1872	City . .	Surface water.
168	173	Norristown	Pennsylvania .	13,063	1847	Company	Schuylkill Riv.



No.	Mode of Supply.	Builders of Pumping Machinery.	Cost of Works	Bonded Debt.	Rate of Interest	Officers of Works.
136	Pump to res.	Chas. Hegewald.*	\$200,000	\$100,000		Frank Schefold, C. E. Sup. and Eng.
16	Pump to res.	H. R. Worthington	3,086,671	3,240,000	7	Geo. R. Gray, Sup. F. W. Meeker, Sec.
83	Pump to res.	Geo. W. Quintard, H. R. Worthington.	1,030,639			R. C. P. Coggeshall, S. J. H. Hathaway, Reg.
173	Pump to res.	Knowles Man. Co.	200,000	100,000	6	J. Ward, Tr. & Sup.
482	Pump to res.	H. R. Worthington. Wilson, Snyder & Co.	50,000	25,000	6	R. E. Hoopes, Sup.
184	Gravity . . .		225,000	190,000	6	
128	Pump to res.	C. Carr, A. Carr, H. R. Worthington.	440,000			A. J. Jones, Sup.
122	Gravity . . .		432,891	284,500		W. C. Miller, Sup.
159	no returns					
745	Pump to tank	H. R. Worthington	7,000	5,000	7	W. H. Wade, Sup. S. C. Lancaster, Clk.
480	Pump to res.	Henderson, G. F. Blake Man. Co	100,000	50,000	5	J. G. Shaw, Pres. I. C. Slaw, Sup.
258	Pump to res.	G. F. Blake Man. Co				J. H. Harlow, S. & Eng. L. H. Williams, S. & Tr.
731	no returns					
38	Pump to reservoir and Gravity.	H. R. Worthington	842,520	325,000		E. I. Foote, Sec.
609	Gravity . . .		30,000			C. L. Frost, Sec.
206	Gravity . . .		291,840			W. H. Richards, Sup.
671	Gravity . . .		30,036	none		C. H. Noble, Sec. & Tr. H. O. Warner, Sup.
10	Pump to res.	Knowles Man. Co.	1,300,000			
105	Pump to res.	Cope & Maxwell Co. Holly Man. Co.	780,781	700,000		B. R. Morton, Eng. and Sup.
142	Pump to res.	A. Carr, L. J. Knowles.	500,000			C. B. Weaver, Sup. and Tr.
773	no returns					
130	Pump to res.	H. R. Worthington	854,937			A. F. Noyes, Eng.
	Gravity . . .					
1	Pump to stand- pipe.	W. E. Worthen, H. R. Worthington.	33,712,197	16,505,000		I. Newton, Ch. Eng.
772	Gravity . . .			no returns		
505	Pump direct	Holly Man. Co.	38,966			F. Spaulding, Pres. B. Rhodes, C. E. & S.
582	Pump to res.		100,000			J. B. Lewis, Man.
438	Gravity . . .					S. L. Wiley, Pres, C. T. Wiley, Sup.
90	Pump direct	H. R. Worthington, Holly Man. Co.	531,618	500,000		C. H. Rowland, Sup. J. R. Todd, Reg.
168	Pump to res.	R. S. Newbold, H. R. Worthington.	275,000	90,000	5	H. S. Sechler, Sec. John Slingluff, Sup.



## NOR-OWE.

No. in Sta- tistics	No. in His- tory.	Name of Town.	State or Province.	Population, 1880.	Date of Construction of Works.	By whom owned.	Source of Supply.
213	382	North Adams	Massachusetts	10,191	1865	Town . .	Surface water.
179	64	Northampton	Massachusetts	12,172	1871	City . .	Surface water.
655	467	Northborough	Massachusetts	1,676	1882	Town . .	Surface water.
774	438	North Carolina Insane Asylum	North Carolina		1876	Asylum .	Surface water.
737		North San Juan	California . . .	656	no	returns	
372		Norwalk . .	Connecticut . .	5,308	1872	Borough	Surface water.
358	91	Norwalk . .	Ohio . . . . .	5,704	1870	City . .	Huron River.
146	46	Norwich . .	Connecticut . .	15,112	1868	City . .	Surface water.
355	319	Norwich . .	New York . . .	5,756	1881	Company	Hopkins Brook.
706		Nunda . . .	New York . . .	1,037	no	returns	
56	261	Oakland . .	California . . .	34,555	1866	Company	San Leandro and Senescal Creeks.
341		Ogden . . .	Utah . . . . .	6,069		Company	
209	96	Ogdensburg	New York . . .	10,341	1868	City . .	Oswegatchie R.
292	280	Oil City . .	Pennsylvania .	7,315	1872	City . .	Allegheny River
686		Olympia . .	Washington Territory	1,232	no	returns	
70	175	Omaha . . .	Nebraska . . .	30,518	1881	Company	Missouri River.
535	468	Oneonta . .	New York . . .	3,002	1882	Company	Surface water.
517		Orange . .	Massachusetts	3,169	no	returns	
165		Orange . .	New Jersey . .	13,207	in progress	Town . .	Surface water.
542		Orangeville	Ontario . . . .	2,847	no	returns	
702		Oregon . .	Illinois . . . .	1,088		City . . .	Rock River.
647		Oroville . .	California . . .	1,743	no	returns	
415		Oskaloosa .	Iowa . . . . .	4,598	1880	Company	Surface water.
99	145	Oswego . .	New York . . .	21,116	1868	Company	Oswego River.
277		Ottawa . . .	Illinois . . . .	7,834	no	returns	
80	34	Ottawa . . .	Ontario . . . .	27,412	1872	City . .	Ottawa River.
240	256	Ottumwa . .	Iowa . . . . .	9,018	1878	Company	Des Moines R.
364	402	Owego . . .	New York . . .	5,525	1879	Company	Surface water.
333	329	Owensboro	Kentucky . . .	6,231	1879	Company	Ohio River.
423	235	Owen Sound	Ontario . . . .	4,426	1880	Company	Spring.



No.	Mode of Supply.	Builders of Pumping Machinery.	Cost of Works.	Bonded Debt.	Rate of Interest	Officers of Works.
213	Gravity . . .		\$180,000			Thos. A. Hodge, Sup.
179	Gravity . . .		209,322			Jonas M. Clark, Sup.
655	Gravity . . .		52,000	\$50,000	4	C. Potter, D. Wood, S. Wood, Commissioners
774	Gravity . . .		21,835			
737	no returns					
372	Gravity . . . no returns		221,000			
358	Pump direct	H. R. Worthington, Holly Man. Co.	175,000			A. Joslin, Sup.
146	Gravity . . .		411,870			H. B. Winship, Eng. and Sup.
355	Gravity . . .		70,000			T. DeW. Miller, Sec. Cyrus B. Martin, Tr.
706	no returns					
56	Gravity . . .		3,961,644	495,000	8	A. Chabot, Pres. & Eng Wm. H. Medd, Sec.
341	Gravity . . .	no returns				E. H. Orth, Sup.
209	Pump direct	Holly Man. Co. Vergennes Mch. Co.*	150,000			A. H. Lord, Sup
292	Pump to res. "Eclipse."		160,000	93,000	8	S. D. Miller, Sup.
686	no returns					
70	Pump to res.	Knowles Man. Co.	400,000	not given		N. Shelton, Sec. & Tr.
535	Gravity . . .		47,000	6,000	6	G. I. Wilber, V.-Pres. T. A. Norton, Sup.
517	no returns					
165	Gravity . . .		in progress			
542	no returns					
702	Pump to res.	no returns				W. C. Bunker, City Clk.
647	no returns					
415	Pump direct	Holly Man. Co.	102,000	no returns		
99	Pump to res.		not given			Delos DeWolf, Pres. D. Mannering, Sec.
277	no returns					
80	Pump direct	Jos. Hall Man. Co. N. S. Blasdell & Co.*	914,000			R. Surtees, C. E., Man.
240	Pump to res.	Vergennes Mach. Co	not given			W. F. McCue, Sup.
364	Gravity . . .		not given			S. L. Wiley, Gen. Man. H. W. Moore, Sup.
333	Pump direct	Holly Man. Co.	not given	100,000	6	H. P. Martin, Sup. H. H. Hodgson, S. & T.
423	Gravity . . .		35,000			S. J. Parker and R. Notter, Owners.



OXF-PLA.

No. in Sta- tistics	No. in His- tory.	Name of Town.	State or Province.	Population, 1880.	Date of Construction of Works.	By whom owned.	Source of Supply.
665	499	Oxford . . .	Pennsylvania .	1,502	1869	Borough	Surface water.
468	478	Painesville .	Ohio . . . . .	3,841	1882	Company	Ground water.
536	358	Palestine . .	Texas . . . . .	2,997	1882	Company	Springs.
425	74	Paris . . . .	Illinois . . . . .	4,373	1879	City . . .	Ground Water.
516		Paris . . . .	Ontario . . . . .	3,173	no	returns	.
662	364	Park City .	Utah . . . . .	1,542	1880	Company	Surface water.
691	436	Parkdale . .	Ontario . . . . .	1,170	1882	City . . .	Lake Ontario.
631		Parker City	Pennsylvania .	1,835		Company	
326	324	Passaic . . .	New Jersey . .	6,532	1872	Company	Surface water and Passaic River.
37	134	Paterson . .	New Jersey . .	51,031	1856	Company	Passaic River.
113	75	Pawtucket .	Rhode Island .	19,030	1879	City . . .	Surface water.
239		Peabody . .	Massachusetts	9,028	1799 1868	Town . .	Surface water.
310	76	Peekskill . .	New York . . .	6,893	1875	City . . .	Surface water.
74	148	Peoria . . .	Illinois . . . . .	29,259	1869	City . . .	Illinois River.
408		Perth Amboy	New Jersey . .	4,808	1882	Company	
374	417	Peru . . . .	Indiana . . . . .	5,280	1879	City . . .	Wabash River.
504	254	Petaluma .	California . . .	3,326	1872	Company	Surface water.
314	460	Peterborough	Ontario . . . . .	6,812	1882	Company	River Otonabee.
96	274	Petersburg .	Virginia . . . . .	21,656	1857	City . . .	Surface water.
690	454	Petrolia . .	Pennsylvania .	1,186	1874	Company	Artesian well.
2	2	Philadelphia	Pennsylvania	847,170	1801	City . . .	Schuylkill River, Delaware River.
317	85	Phoenixville	Pennsylvania .	6,682	1873	Borough	Schuylkill River
718	247	Pioche . . .	Nevada . . . . .	900	1872	Company	Springs.
345	351	Piqua . . . .	Ohio . . . . .	6,031	1875	City . . .	Surface water.
13	25	Pittsburg . .	Pennsylvania	156,389	1824	City . . . . Company .	Allegheny River, Monongahela River
162	112	Pittsfield . .	Massachusetts	13,364	1854	Town . .	Surface water and Pond.
288	269	Pittston . .	Pennsylvania .	7,472	1855	Company	Susquehanna R.
614		Placerville .	California . . .	1,951		Company	Mining Canal.
680	345	Plainwell .	Michigan . . . .	1,356	1870	Village .	Kalamazoo Riv.
377		Plattsburgh	New York . . .	5,245		Town . .	



No.	Mode of Supply.	Builders of Pumping Machinery.	Cost of Works.	Bonded Debt.	Rate of Interest	Officers of Works.
665	Pump to res.		\$31,000	\$28,000	5	John Reed, Sup.
468	Pump to tank	H. R. Worthington	100,000	none		C. A. Avery, Pres. B. F. Stephens, Sup.
536	Pump to stand- pipe.	W. E. Worthen	160,000	80,000	6	G. C. Stevens, Sup.
425	Pump direct	G. F. Blake Man. Co.	39,706			J. C. Collum, Sup.
516	no returns					
662	Gravity . . .		19,000	none		W. M. Ferry, Sup. Thos. Cupit, Sec.
691	Pump direct	Perkins.	49,000		6	John Patrick, Sup.
631	Pump . . .		not given			A. Randolph, Sec.
326	Gravity and pump to reservoir.	Charles Carr.	110,000		6	W. Paulison, Sec. T. D. Hoxie, Sup & Eng
37	Pump to res.	H. R. Worthington	not given			John Ryle, Pres. William Ryle, Sup.
113	Pump to res.	Corliss Steam En- gine Co.	774,992			Edward Darling, Sup. E. A. Grout, Clk.
239	Gravity and pump to stand-pipe for high service.		233,580	215,000	4-7	D. S. Littlefield.
310	Pump to res.	Vergennes Mach. Co	136,300			Chas. R. Swain, Sup.
74	Pump direct	Holly Man. Co., Dean Brothers, A. S. Cameron. H. R. Worthington.	450,000	450,000	10-6	T. J. Kelly, Sup.
408	Pump . . .					Milton A. Brown, Sup Wm. Hall, Pres.
374	Pump to res.	H. R. Worthington	111,068			
504	Gravity . . .		130,000	none		B. L. Hesseltine, Sec. and Sup.
314	Pump direct	Knowles Man. Co.	60,000			Geo. W. Hatton, Sec.
96	Pump to res.	Talbott & Sons,* Uriah Wells.	150,000	125,000	8	W. Kirkham, Sup.
690	Pump to tank	G. F. Blake Man. Co.	8,000	none		S. W. Harley, Sec. F. L. Masson, Sup.
2	Pump to res.	I. P. Morris' Son, H. R. Worthington, Wm. Cramp & Son, Merrick & Sons.	not given			W. Ludlow. Ch. Eng.
317	Pump to res.	H. R. Worthington and Thatcher Pump.	200,000			F. B. Rhoads, Sup.
718	Gravity . . .		150,000			R. H. Elam, Sup.
345	Pump direct	Vergennes Mach. Co	380,000	290,000	6-8	J. W. King, Sec.
13	Pump direct and pump to res.	M. Stackhouse.	not given			J. M. Atkinson, Sup.
162	Gravity . . .		195,000			J. M. Hatch, Sup.
288	Pump to res.	H. R. Worthington, Knowles Man. Co.	106,593	14,000	6	R. J. Wisner, Pres. John Anderson, Sup.
614	Gravity . . .		no returns			F. A. Bishop.
680	Pump direct	Holly Man. Co.	4,000	For fire pro- tection.		J. Sternberg, Sup.
377	Gravity . . .					D. C. Boynton, Sup.



PLE-RAH.

No. in Sta- tistics	No. in His- tory.	Name of Town.	State or Province.	Population, 1880.	Date of Construction of Works.	By whom owned.	Source of Supply.
754	103	Pleasant Hill	Kentucky . . .	300	1833	Company	Spring.
301	136	Plymouth	Massachusetts	7,093	1855	Town . .	Ponds.
650	229	Plymouth	New Hampshire	1,719	1881	Company	Springs and Surface water.
342		Plymouth	Pennsylvania .	6,065	1876	Company	Springs.
694	248	Port Byron	New York . .	1,146	1872	Village .	Owasco Lake.
360		Port Hope	Ontario . . . .	5,585	no	returns	
243	157	Port Huron	Michigan . .	8,883	1873	City . . .	St. Clair River.
249		Port Jervis	New York . .	8,678	1870	Company	Surface water.
58	118	Portland	Maine . . . . .	33,810	1869	Company	Lake Sebago.
656		Portland	Michigan . .	1,670		Town . .	
775	287	Portland	New Brunswick		(see	St. John)	
124		Portland	Oregon . . . . .	17,577	no	returns	
223		Portsmouth	New Hampshire	9,690	1797	Company	Springs.
193	372	Portsmouth	Ohio . . . . .	11,321	1871	City . . .	Ohio River.
550	100	Potsdam	New York . .	2,762	1871	Village .	Racket River.
373	240	Pottstown	Pennsylvania .	5,305	1871	Company	Schuylkill River.
164	481	Pottsville	Pennsylvania .	13,253	1836 1854 1875	Company	Surface water.
106	58	Poughkeepsie	New York . .	20,207	1870	City . . .	Hudson River.
546	210	Prairie du Chien	Wisconsin . . .	2,777	1877	Company	Artesian well.
630		Prescott	Arizona . . . . .	1,836	no	returns	
514		Princeton	New Jersey . .	3,209	in progress	Company	Ground water.
776		Prospect Park	New York . .		1869	Park Com.	Ground water.
777		Providence	Pennsylvania .			Company	no returns.
21	17	Providence	Rhode Island	104,857	1772 1870	City . .	Pawtucket River.
513	194	Pueblo	Colorado . .	3,217	1874	City . .	Arkansas River.
778		Pullman	Illinois . . . . .		no	returns	
29	153	Quebec	Quebec . . . . .	62,446	1853	City . . .	St. Charles Riv.
81	384	Quincy	Illinois . . . .	27,268	1873	Company	Mississippi Riv.
138	151	Racine	Wisconsin . . .	16,031	1870	Company	Artesian well.
327	114	Rahway	New Jersey . .	6,455	1871	City . . .	Rahway River.



No.	Mode of Supply.	Builders of Pumping Machinery.	Cost of Works.	Bonded Debt.	Rate of Interest	Officers of Works.
754	Pump to tank		not given			C. A. Tasker, Man.
301	Gravity . . .		\$135,000	\$90,000		R. W. Bagnall, Sup.
650	Gravity . . .		25,000	none		W. F. Langdon, Sup.
342	Gravity . . . no returns		50,000			
694	Pump to res. For fire protection		10,000	3,000	6	Charles M. Storms, Water Commissioner.
360	no returns					
243	Pump direct	Holly Man. Co.	180,000	150,000	10	L. Atkins, Sec. & Sup.
249	Gravity . . .	no returns				
58	Gravity . . .	not given	1,000,000		6	D. W. Clark, Pres. Geo. P. Westcott, Sup.
656	Pump . . .	no returns				F. M. Cutcheon, Sup.
775						
124	Pump . . .	H. R. Worthington				
223	Gravity . . .					Oliver Ayres, Sup.
193	Pump direct	Holly Man. Co.	200,000	150,000	8	Chas. Zeigler, Sup.
550	Pump direct	Holly Man. Co.	50,000			D. A. B. Bailey, Sup.
373	Pump to res.	H. R. Worthington, Henderson.	90,000	18,000	5	Isaac Fagely, Pres. Isaac Geist, Sup.
164	Gravity . . .		200,000			Daniel Morton, Sup.
106	Pump to res.	H. R. Worthington	555,546	550,000	7	C. E. Fowler, C. E., Sup D. R. Thompson, Clk.
546	Flowing well.		5,000			W. Newton, Sec.
630	no returns					
514	Pump to tank	W. E. Worthen.				W. Libbey, Jr., Sec.
776	Pump to res.	H. R. Worthington				J. Y. Culyer, Ch. Eng.
777	Gravity . . .	no returns				J. B. Fish, Sup.
21	Pump to res.	H. R. Worthington, Providence S. En. Co Corliss St'm Eng. Co Paulding, Kemble & Co.	not given			S. M. Gray, City Eng.
513	Pump direct	Holly Man. Co.	160,000	140,000	8	C. J. Stetson, Ch. Eng.
778	no returns					
29	Gravity . . .		1,300,000	1,300,000		C. Baillargé, C. E., Man
81	Pump to res.	McGowan Pump Co. Frost Man. Co.	450,000			L. Bull, Pres. W. B. Bull, Sup.
138	Flowing well.		14,000			H. Raymond, Sup.
327	Pump direct	H. R. Worthington	185,000			H. B. Bunn, Sup.



No. in Sta- tistics	No. in His- tory.	Name of Town.	State or Province.	Population, 1880.	Date of Construction of Works.	By whom owned.	Source of Supply.
699		Randolph .	New York . .	1,111	1883	Company	Springs.
573	445	Raton . . .	New Mexico .	2,500	1880	Company	Springs and well
44		Reading . .	Pennsylvania .	43,278	1821	City . . .	Surface water.
601	500	Red Bluff .	California . .	2,106	1861	Company	Surface water and Sacramento River.
701		Reed City .	Michigan . .	1,091	no	returns	
684		Reno . . .	Nevada . . .	1,302	no	returns	
478	404	Renovo . .	Pennsylvania .	3,708	1872	City . . .	Surface water.
673		Reynoldsville	Pennsylvania .	1,410	no	returns	
682	281	Richfield Springs	New York . .	1,307	1879	Village .	Surface water.
27	30	Richmond .	Virginia . . .	63,600	1830	City . . .	James River.
779	428	Richmond Furnace	Massachusetts		1882	Company	Surface water.
790		Ridgeway .	Pennsylvania .	1,100		Company	Spring.
521		Ripon . . .	Wisconsin . . .	3,117	in	progress	
625	333	Rochelle . .	Illinois . . .	1,893	1877	City . . .	Springs.
23	23	Rochester .	New York . .	89,366	1876	City . . .	Hemlock Lake, Canadice Lake and Genesee River.
167	171	Rockford .	Illinois . . .	13,129	1875	City . . .	Rock River.
188	507	Rock Island	Illinois . . .	11,659	1872	City . . .	Mississippi Riv.
283	298	Rockland .	Maine . . . .	7,599	1851	Company	Lake.
349		Rockville .	Connecticut .	5,902	1867	Company	Lake
464	95	Rome . . .	Georgia . . .	3,877	1871	City . . .	Ground water.
178	94	Rome . . .	New York . .	12,194	1872	City . . .	Mohawk River.
287		Rutland . .	Vermont . . .	7,502		City . . .	
296	222	St. Albans .	Vermont . . .	7,193	1873	Village .	Surface water.
224	291	St. Catherines	Ontario . . .	9,631	1846 1876	Town . .	Surface water.
391	245	St. Charles .	Missouri . . .	5,014	1881	Company	Missouri River.
780		St. Cunegonde	Quebec . . .		no	returns	
781		St. Gabriel	Quebec . . .		no	returns	
738		St. Henri . .	Quebec . . .	650	no	returns	
371		St. Hyacinthe	Quebec . . .	5,321	no	returns	
669		St. Jerome .	Ontario . . .	1,450	no	returns	



No.	Mode of Supply.	Builders of Pumping Machinery.	Cost of Works	Bonded Debt.	Rate of Interest	Officers of Works.
699	Gravity . . .		no returns			
573	Gravity and pump to reservoir.		\$40,000			
44	Gravity . . .		no returns	300,000		
601	Gravity and pump to standpipe.	W. F. Garrett.	not given			F. J. Nugent, Col. C. Cadwalader, Sup.
701			no returns			
684			no returns			
478	Gravity . . .		65,000	\$45,000		J. H. Ferguson, Sup.
673			no returns			
682	Gravity . . .		24,000	23,000	6	S. F. Cole, Sup.
27	Pump to res.	H. R. Worthington				J. L. Davis, Sup.
779	Gravity . . .					R. A. Berget, Man.
790	Gravity . . .					Dr. Earle, Owner.
521			no returns			
625	Pump direct	H. R. Worthington	19,000	5,000	7	G. F. Northrop, Chn.
23	Gravity and pump direct.	Holly Man. Co.	3,313,784	3,182,000		J. N. Tubbs, Ch. Eng.
167	Pump direct	Holly Man. Co.	280,070			J. A. Ferguson, Ch. Eng.
188	Pump direct	Holly Man. Co. H. R. Worthington,	220,000	113,000	8	F. A. Cramer, Sup.
283	Pump direct	Holly Man. Co.				
349	Gravity . . .		no returns			
464	Pump to res.	Noble Bros. & Co.				
178	Pump to res.	Watertown Steam Engine Co.	165,000			C. T. Hayden, Sup.
287	Gravity . . .					J. M. Davis, Sup.
296	Gravity . . .		165,000	156,000		Marshall Mason, Sup.
224	Gravity . . .		263,070			J. Albert Mills, Sup.
391	Pump to tank	H. R. Worthington	160,000	80,000	6	J. W. Ruenzie, Sup.
780	Pump direct	Holly Man. Co.				
781			no returns			
738			no returns			
371			no returns			
669			no returns			



## ST. J-SAN.

No. in Sta- tistics	No. in His- tory.	Name of Town.	State or Province.	Population, 1900.	Date of Construction of Works.	By whom owned.	Source of Supply.
64	287	St. John and Portland	New Brunswick	32,000	1836 1849	City . .	Lily Lake and Little River.
67	473	St. Johns .	Newfoundland	30,743	1847 1862	Company	Windsor Lake.
430		St. Johns .	Quebec . . . .	4,314	no	returns	
502	224	St. Johnsbury	Vermont . . . .	3,360	1876	Village .	Passumpsic Riv.
703		St. Johnsville	New York . . .	1,072		Village .	
62	407	St. Joseph .	Missouri . . . .	32,431	1880	Company	Missouri River.
613	208	St. Louis . .	Michigan . . . .	1,975	1880	City . . .	Pine River.
6	6	St. Louis . .	Missouri . . . .	350,518	1830	City . . .	Mississippi Riv.
48	292	St. Paul . .	Minnesota . . .	41,473	1870	City . . .	Lakes.
260	485	St. Thomas	Ontario . . . .	8,367	1874	Company	Surface water.
97	397	Sacramento	California . . .	21,420	1854	City . . .	Sacramento Riv.
207	426	Saginaw City	Michigan . . . .	10,525	1873	City . . .	Saginaw River.
570	347	Salamanca .	New York . . . .	2,531	1881	Company	Springs and Surface water.
79	44	Salem . . . .	Massachusetts	27,563	1796 1869	City . . .	Springs and Surface water.
681	327	Salem . . . .	North Carolina	1,340	1800 1878	Company	Ground water.
387	440	Salem . . . .	New Jersey . . .	5,056	1882	City . . .	Surface water.
450	449	Salem . . . .	Ohio . . . . .	4,041	1862	Company	Spring and Artesian well.
569	246	Salem . . . .	Oregon . . . . .	2,538		Company	Willamette Riv.
644	472	Salem . . . .	Virginia . . . . .	1,759	1876	Town . .	Springs.
522		Salina . . . .	Kansas . . . . .	3,111	no	returns	
629	352	Salinas City	California . . . .	1,854	1873	Company	Artesian wells.
100	160	Salt Lake City	Utah . . . . .	20,768	1874	City . .	Mountain springs and melting snow.
103	510	San Antonio	Texas . . . . .	20,550	1878	Company	Spring.
782		San Buenaventura	California . . . .		no	returns	
744	506	Sand Beach	Michigan . . . .	534	1881	Company	Lake Huron.
559	340	San Diego .	California . . . .	2,637	1873	Company	San Diego Riv.
140	50	Sandusky .	Ohio . . . . .	15,838	1875	City . . .	Sandusky River.
756		Sanford . .	Florida . . . . .	220	in	progress	
9	9	San Francisco	California . . . .	233,959	1858	Company	Surface water.
175		San Jose . .	California . . . .	12,567	1869	Company	Surface water.



No.	Mode of Supply.	Builders of Pumping Machinery.	Cost of Works,	Bonded Debt.	Rate of Interest	Officers of Works.
64	Gravity . . .		\$988,000			G. Murdoch, C. E., Sup
67	Gravity . . .		520,000	not given		Theo. Clift, Sec. John Martin, Eng.
430	no returns					
502	Pump direct	J. P. Flanders.	80,000	\$75,000		John N. Gale, Sup.
703	Gravity . . .	no returns				W. E. Churchill, Clk.
62	Pump to res.	H. R. Worthington	850,000	400,000	6	T. J. Chew, Jr., Sec. H. F. Juengst, Eng.
613	Pump direct	Holly Man. Co. Knapp, F't Pitt Fdy. Co., Hartford Foundry & Machine Co., G. B. Allen & Co.	8,000	7,000	5	Stiles Kennedy, Pres. Eugene King, Sup.
6	Pump to res.					T. J. Whitman, Com.
48	Gravity . . .		not given			John Caulfield, Sup.
260	Pump direct	Holly Man. Co.	45,000	not given		J. A. Bell, City Eng.
97	Pump direct	Holly Man. Co.	350,000	none		W. Guttenger, Sup
207	Pump direct	Holly Man. Co.	175,000	150,000	8	C. D. Dixon, Sup.
570	Gravity . . .		not given			T. A. Keeler, Pres.
79	Pump to res.	H. R. Worthington	not given			Benj. S. Gnesch, Sup.
681	Pump to res.		6,400			J. F. Shaffner, Pres.
387	Pump direct	Holly Man. Co.	77,000	75,000	5	Chas. W. Casper, Sup.
450	Pump to tank	H. R. Worthington	not given			E. W. Silver, Owner.
569	Pump to res.	Smith.				W. F. Boothby, Pres. David Allen, Sec.
644	Pump to res.		12,817	10,500	8	Jas. P. Boon, Sup.
522	no returns	Holly Man. Co.				
629	Pump to tank	Knowles Man. Co.				J. B. Iverson, Pres. J. P. Lauritzen, Sup.
100	Gravity . . .		250,000			G. M. Ottinger, Sup.
103	Pump direct and to reservoir.	H. R. Worthington	165,000	160,000		J. Frazier, Sec.
782	no returns					
744	Pump direct	M. Walker.	4,000	none		J. Jenks & Co., Own.
559	Pump to res.	Hooker.	79,000	none		E. J. Buell, Sup.
140	Pump to stand- pipe.	H. R. Worthington	390,918			David M. Arndt, Sup. Chas. Cross, Sec.
756						
9	Gravity . . .		not given			C. W. Howard, Pres. Chas. Elliot, Sup.
175	Gravity and pump	no returns				Ned Williams, Sup.



## SAN-SOU.

No. in Sta- tistics	No. in His- tory.	Name of Town.	State or Province.	Population, 1880.	Date of Construction of Works.	By whom owned.	Source of Supply.
590		San Luis Obispo	California . . .	2,243		Company	
714		San Mateo .	California . . .	932		Company	
587	497	San Rafael	California . . .	2,276	1871	Company	Springs and Surface water.
495	341	Santa Barbara	California . . .	3,460	1830	Company	Surface water.
462	480	Santa Cruz	California . . .	3,898	1876	Company	Branciforte and Majors Creeks.
322		Sante Fé . .	New Mexico .	6,635		Company	
484		Santa Rosa	California . . .	3,616	no	returns	
257	90	Saratoga . .	New York . .	8,421	1871	City . . .	Springs and Surface water.
465	182	Sarnia . . .	Ontario . . .	3,874	1876	Town . .	St. Clair River.
69	137	Savannah .	Georgia . . .	30,709	1854	City . . .	Savannah River.
157	234	Schenectady	New York . .	13,655	1871	Company	Ground water.
41	251	Scranton . .	Pennsylvania .	48,850	1857	Company	Surface water.
574		Seaforth . .	Ontario . . .	2,480	no	returns	
226	187	Sedalia . .	Missouri . . .	9,561	1871	City . . .	Surface water.
608	356	Sewickley .	Pennsylvania .	2,053	1874	Borough	Springs.
297		Shamokin .	Pennsylvania .	8,184		Company	
293		Sheboygan .	Wisconsin . .	7,314		City . . .	Well.
783		Shelburne Falls	Massachusetts		1876	Fire Dep.	For fire protection.
679		Shelton . .	Connecticut .	1,362			
214		Shenandoah	Pennsylvania .	10,147		Company	
424	146	Sherbrooke	Quebec . . .	4,402	1881	Company	Magog River.
711		Sherburne .	New York . .	944	in	progress	
470	221	Sidney . . .	Ohio . . . .	3,823	1873	City . . .	Surface water.
740	306	Silver City .	Nevada . . .	605			Supplied from Virginia City.
388		Silver Cliff	Colorado . . .	5,040		Town . .	
657	209	Slatington .	Pennsylvania .	1,634	1861	Company	Springs.
86	323	Somerville .	Massachusetts	24,933	1868	City . . .	Mystic Works.
523	369	Somerville .	New Jersey .	3,105	1882	Company	Raritan River.
353		Sorel . . . .	Quebec . . . .	5,791	no	returns	
163	124	South Bend	Indiana . . . .	13,280	1873	Town . .	St. Joseph's Riv.



No.	Mode of Supply.	Builders of Pumping Machinery.	Cost of Works.	Bonded Debt.	Rate of Interest	Officers of Works.
590	no returns					
714	no returns					
587	Gravity . . .		\$450,000	\$50,000	6	Robert Walker, Sup. F. R. Catton, Sec.
495	Gravity . . .		50,586	none		R. B. Canfield, Pres. A. W. Canfield, S. & S.
462	Gravity . . .		180,000	50,000	8	W. H. Duke, Sup. G. F. Bowman, Sec.
322	Gravity . . .					Gustave Dyes, Sup.
484	no returns					
257	Pump direct	Holly Man. Co.	250,000			H. W. Keith, Sup.
465	Pump direct	Holly Man. Co.	59,590	70,000	6	R. Turner, Eng & Sup
69	Pump to tank and standpipe.	H. R. Worthington	300,000	198,000	5	A. N. Miller, Sup.
157	Pump direct	Holly Man. Co.	not given			C. Stanford, Jr., Sec.
41	Gravity . . .		not given	none		C. E. Judson, Sup. and Eng.
574	no returns					
226	Pump direct	Holly Man. Co.	135,000	125,000	5	L. Kumm, Chn. Com.
608	Gravity . . .		75,000	60,000 14,000	8 6	J. Boobyer, Sec. John Patton, Sup.
297	Gravity . . .	no returns				Holden Chester, Sup.
293	Flowing well	For fire protection				
783	Gravity . . .	no returns				
679						D. S. Brinsmade, Sec.
214	Gravity . . .	no returns				S. D. Hess, Sup.
424	Pump to res.	Knowles Man. Co.	not given			R. N. Hall, Pres. A. O. Granger, M. & Tr.
711	in progress					
470	Pump direct	Holly Man. Co.	54,000		6	
740						
388	Pump . . .	no returns				O. Carstarphen.
657	Gravity . . .		10,000	10,000	6	O. A. Neff, Pres.
86	Gravity . . .		342,608	335,000	5-6	N. Dennett, Sup.
523	Pump to stand- pipe.	H. R. Worthington	50,000			A. V. D. Honeyman, S. J. Harper Smith, Sup.
353	no returns					
163	Pump to stand- pipe.	Vergennes Machine Co.	225,000			E. L. Abbott, Sup.



## SOU-TEC.

No. in Sta- tistics	No. in His- tory.	Name of Town.	State or Province.	Population, 1880.	Date of Construction of Works.	By whom owned.	Source of Supply.
399	275	South Bethlehem	Pennsylvania .	4,925	1875	Company	Lehigh River.
454	459	Southbridge	Massachusetts	4,000	1880	Company	Springs and Surface water.
552	117	South Hadley Falls	Massachusetts	2,750	1872	Village .	Springs.
477	361	South Norwalk	Connecticut .	3,726	1875	City . . .	Surface water.
290	466	Spencer . .	Massachusetts	7,466	1882	Company	Surface water.
108	414	Springfield	Illinois . . . .	19,743	1866	City . . .	Sangamon River
60	43	Springfield	Massachusetts	33,340	1843 1873	City . . .	Surface water.
101	370	Springfield	Ohio . . . .	20,730	1882	City . . .	Buck Creek.
697		Springdale	Maine . . . . .	1,116	no	returns	
568	490	Stamford .	Connecticut .	2,540	1871	Company	Trinity Lake.
721	227	State Centre	Iowa . . . . .	880	1879	City . . .	Wells.
319	337	Staunton .	Virginia . . . .	6,664	1875	City . .	Springs.
385		Sterling . .	Illinois . . . .	5,087			
181	416	Steubenville	Ohio . . . . .	12,093	1835	Town . .	Ohio River.
236	109	Stillwater .	Minnesota . .	9,055	1880	Company	McKusick's Lake.
581	128	Stockbridge	Massachusetts	2,357	1860	Company	Springs and Surface water.
211		Stockton . .	California . .	10,282	no	returns	
645		Stonington	Connecticut .	1,755	no	returns	
381		Streator . .	Illinois . . . .	5,157	1882	City . . .	Artesian well.
628	295	Stroudsburg	Pennsylvania .	1,860	1876	Company	Springs.
643		Summit Hill	Pennsylvania .	1,763	no	returns	
576		Suspension Bridge	New York . .	2,476	1875	Town . .	Niagara River.
493	126	Susquehanna	Pennsylvania .	3,467	1874	Company	Springs.
572		Swampscott	Massachusetts	2,500			Supplied from Lynn
529		Sycamore .	Illinois . . . .	3,028		Town . .	Ground water.
35	82	Syracuse .	New York . .	51,792	1829	Company	Spring and Surface water.
356		Tamaqua .	Pennsylvania .	5,730	1850	Borough	Springs.
530	297	Tarrytown .	New York . .	3,025	1877	Village .	Surface water.
98	53	Taunton . .	Massachusetts	21,213	1877	City . . .	Ground water.
600		Tecumseh .	Michigan . . .	2,111		Town . .	



No.	Mode of Supply.	Builders of Pumping Machinery.	Cost of Works,	Bonded Debt.	Rate of Interest	Officers of Works.
399	Pump direct	Bethlehem Iron Co. A. S. Cameron.	\$32,378	\$13,000	7	H. S. Goodwin, S. & Tr. B. E. Lehman, Sup.
454	Gravity . . .		17,000	7,000	5-6	C. A. Dresser, Pres.
552	Gravity . . .		54,000			Benj. Aldrich, Pres.
477	Gravity . . .		100,000			W. B. Rider, Eng.
290	Gravity . . .		120,000	none		Luther Hill, Pres. G. L. Goodhue, G. Man.
108	Pump to res.	H. R. Worthington	450,000	450,000	8	L. R. Brown, Sec. Fred. McCarthy, Sup.
60	Gravity . . .		1,258,752	1,200,000	6-7	J. C. Hancock, Sup. Geo. A. Ellis, Reg.
101	Pump to stand- pipe.	H. R. Worthington	380,000	380,000		Edward Gwynn, Sup.
697	no returns					
568	Gravity . . .		149,783			Geo. E. Whitney, Sup. W. Ferguson, Sec.
721	Pump to tank	Batavia Wind Eng. and Pump Co.	10,000	7,000	7	J. O. Cutler, Sup.
319	Pump to res.	H. R. Worthington	100,000	80,000	8	E. W. Harmon, Sup.
385	For fire purposes only.		not given			
181	Pump to res.	Jas. Means & Co.	37,000	12,000	5	R. L. Irwin, Sup.
236	Gravity and pump to tank.	G. F. Blake Man. Co	200,000			H. H. Harrison, Sup.
581	Gravity . . .		9,500			H. J. Dunham, Sec. and Man.
211	no returns					
645	no returns					
381	Flowing well	For fire protection				S. E. Evans, Sup.
628	Gravity . . .		16,000	none		Fred. Phillips, Sup.
643	no returns					
576	Pump direct	Holly Man. Co.	70,500	no returns		
493	Gravity . . .		6,500			Gaylord Curtis, Pres. C. A. Miller, S. T. & M.
572						
529	Pumping . . .	G. F. Blake Man. Co.	For fire purposes			S. Othello Pike, Sup.
35	Gravity and pump to reservoir.	Holly Man. Co. H. R. Worthington.	650,000			Edward H. Brown, Sec. and Sup.
356	Gravity and pump to reservoir.	Schoener & Allen.	no returns			
530	Pump to res.	Woodward.	16,500			
98	Pump direct	Holly Man. Co.	422,225	380,000	6-4½ 4	W. R. Billings, Clk. P. J. Perrin, Pres.
600	Pump . . .	no returns				



## TER-UNI.

No. in Sta- tistics	No. in His- tory.	Name of Town.	State or Province.	Population, 1880.	Date of Construction of Works.	By whom owned.	Source of Supply.
84	52	Terre Haute	Indiana . . . .	26,042	1873	Company	Wabash River.
591	265	The Dalles	Oregon . . . .	2,232	1862	Company	Surface water.
511	433	Thomaston	Connecticut .	3,225	1880	Company	Surface water.
792		Three Rivers	Michigan . . .	2,525	1882	City . . .	
219	230	Three Rivers	Quebec . . . .	10,000	1875	City . . .	St. Lawrence R.
685		Tidioute . .	Pennsylvania .	1,255		Company	
275	427	Tiffin . . .	Ohio . . . . .	7,879	1879	Company	Sandusky River.
627		Tilsonburg	Ontario . . . .	1,873	no	returns	
746	115	Tioga . . .	Pennsylvania .	520	1874	Company	Surface water.
238	236	Titusville .	Pennsylvania .	9,046	1873	City . . .	Wells.
38	49	Toledo . . .	Ohio . . . . .	50,137	1874	City . . .	Maumee River.
710	371	Tombstone	Arizona . . . .	973	1882	Company	Surface water.
144	464	Topeka . . .	Kansas . . . .	15,452	1882	Company	Kansas River.
24	31	Toronto . .	Ontario . . . .	86,415	1841 1873	City . . .	Lake Ontario.
504	255	Torrington	Connecticut .	3,327	1878	Company	Surface water.
472		Towanda . .	Pennsylvania .	3,814		Company	
624	494	Traverse City	Michigan . . .	1,897	1882	Company	Lake Huron
637		Tremont . .	Pennsylvania .	1,785		Company	
71	373	Trenton . .	New Jersey . .	29,910	1803 1852	City . . .	Delaware River.
593	266	Trinidad . .	Colorado . . .	2,226	1879	Company	Well.
32	33	Troy . . . .	New York . . .	56,747	1833	City . . .	Surface water and Hudson River.
494	338	Truro . . .	Nova Scotia .	3,461	1875	City . . .	Surface water.
304		Tucson . . .	Arizona . . . .	7,007		Company	
698	334	Tunkhannock	Pennsylvania .	1,116	1870	Company	Springs.
402		Turners Falls	Massachusetts	4,876		Company	
797		Tyler . . .	Texas . . . . .	2,423	1882	no	returns
557		Tyrone . . .	Pennsylvania	2,678	no	returns	
715		Unadilla . .	New York . . .	922		Company	
575		Union City	Indiana . . . .	2,478	1873	City . . .	Ground water.
742	178	University of Virginia		600	1858 1868		Surface and Spring water.



No.	Mode of Supply.	Builders of Pumping Machinery.	Cost of Works	Bonded Debt.	Rate of Interest	Officers of Works.
84	Pump direct	Clapp & Jones Man. Co.	\$301,169			J. G. Briggs, Sup.
591	Gravity . . .		37,000			Sam'l L. Brooks, Sup.
511	Gravity . . .		39,000			W. T. Woodruff, S. & T. Nelson Bennett, Sup.
792	Pump direct	M. Walker.				
219	Pump direct		125,000	\$125,000	6	O. Z. Hamel, Sup.
685	Gravity . . .	no returns				S. Tiplin, Sup., W. R. Dawson, Sec.
275	Pump direct					Walter Burnham, Pres M. Scannell, S. & G. M.
627	no returns					
746	Gravity and pump	La France.	21,000			C. H. & F. A. Wickham Owners & Managers.
238	Pump direct	Holly Man. Co.	143,625	136,265	8-7-6-5	S. C. Roof, Sec., G. W. Angier, Sup.
38	Pump to stand- pipe.	H. R. Worthington	1,176,759			Carl Schon, En. & Sup. C. S. Brown, Sec.
710	Gravity . . .	H. R. Worthington	500,000			
144	Pump direct	Holly Man. Co.	162,000	120,000	6	Byron Roberts, Sec., Robert Mood, Sup., C. C. Wheeler, Pres.
24	Pump to res.	H. R. Worthington	2,000,000			Redmond J. Brough, Eng. & Man.
504	Gravity . . .		45,000	none		O. R. Tyler, Sup., C. L. McNeil, S. & T.
472	Gravity and pump					E. T. Fox, Act. Sec.
624	Pump direct	M. Walker	17,000			H. D. Campbell, Pro.
637	Gravity . . .	no returns				I. P. Bechtel.
71	Pump to res.	William Wright.	327,000	265,000	6	John J. Sager, S. & T. John B. Quigley, Sup.
593	Pump to res.	Cope & Maxwell Co.	100,000	none		Delos A. Chappell, O. W. B. Cunningham, S.
32	Gravity and pump to reservoir.	Vergennes Mach. Co Holly Man. Co.	926,082	300,000		D. M. Greene, Ch. E. J. G. Ogden, Clk.
494	Gravity . . .		30,000	30,000	6	Alex. L. Archibald, Eng. and Sup.
304	Gravity . . .	no returns				R. N. Leatherwood, S.
698	Gravity . . .		15,000	none		H. Sickler, Sec. & Man.
402	Gravity and pump	no returns				Wm. P. Crocker, Sup.
797	no returns					
557	no returns					
715	Gravity . . . just completed		no returns			Col. S. North, Man.
575	Pump . . .	Dean Bros.	38,028	no returns		
742	Pump to res.	H. R. Worthington	28,132			G. Peyton, Sup.



URB-WEL.

No. in Sta- tistics.	No. in His- tory.	Name of Town.	State or Province.	Population, 1880.	Date of Construction of Works.	By whom owned.	Source of Supply.
331	189	Urbana . .	Ohio . . . . .	6,253	1878	Company	Well.
57	120	Utica . . .	New York . .	33,914	1849	Company	Surface water.
632		Uxbridge .	Ontario . . .	1,824	no	returns	
348	217	Vallejo . .	California . .	5,987	1871	Company	Surface water.
649	264	Vancouver	Washington Ter.	1,722	1868	Company	Springs.
638		Vergennes .	Vermont . . .	1,782	1868	City . . .	Surface water.
203	306	Virginia City	Nevada . . . .	10,917	1872	Company	Surface water.
294	363	Waco . . .	Texas . . . . .	7,295	1878	Company	Well.
688		Wadsworth	Ohio . . . . .	1,219		Company	
363		Wakefield .	Massachusetts	5,547	no	returns	
485	430	Walla Walla	Washington Ter.	3,588	1865	Company	Springs.
532	470	Wallingford	Connecticut .	3,017	1882	Borough	Lake Pistapaug.
185	161	Waltham . .	Massachusetts	11,712	1873	Town . .	Surface water.
676	421	Walton . .	New York . .	1,389	1879	Company	Surface water.
463		Warren . .	Massachusetts	3,889		Company	
422		Warren . .	Ohio . . . . .	4,428	no	returns	
545	483	Warren . .	Pennsylvania .	2,810	1882	Company	Allegheny Riv.
453		Warren . .	Rhode Island	4,007		Company	
622	188	Warsaw . .	New York . .	1,910	1870	Company	Springs.
705	335	Warwick . .	New York . .	1,043	1872	City . . .	Surface water.
12	13	Washington and Georgetown	Dist. Columbia	159,871	1853	City . . .	Potomac River.
599		Washington	New Jersey . .	2,142		Company	
123	67	Waterbury	Connecticut .	17,806	1868	City . . .	Surface water.
633		Waterford .	New York . .	1,822	no	returns	For fire protection.
204	282	Watertown	New York . .	10,697	1853	City . . .	Black River.
619		Waterville .	Maine . . . . .	1,917	no	returns	
635	502	Watsonville	California . . .	1,799	1879	2 Companies	Corralitos Creek
452	180	Waukegan	Illinois . . . .	4,012	1875	City . . .	Artesian well.
548	206	Waverly : .	New York . .	2,767	1881	Company	Surface water.
500	410	Wellsville .	Ohio . . . . .	3,377	1881	City . . .	Ohio River.



No.	Mode of Supply.	Builders of Pumping Machinery.	Cost of Works.	Bonded Debt.	Rate of Interest	Officers of Works.
331	Pump direct	Holly Man. Co.	\$85,000	\$65,000	6	J. H. Ayers, M. D., Sup. and Treas.
57	Gravity . . .		not given			C. W. Pratt, Sup., B. F. Ray, Sec.
632	no returns					
348	Gravity and pump to reservoir.	Hooker	250,000	none		A. J. McPike, Sup.
649	Gravity . . .		50,000			J. R. Wintler, Sup.
638	Pump direct	Holly Man. Co.	58,000	no returns		
203	Gravity . . .		2,170,000			J. B. Overton, Sup.
294	Pump to tank	Knowles Man. Co.	80,000	50,000	10-7	James E. Eagen, Sup. and Sec.
688	Gravity . . .		no returns			A. L. Carman, Sec.
363	no returns					
485	Gravity . . .		100,000	55,000		J. C. Isaacs, Sec., J. F. Bowman, Sup.
532	Gravity . . .		80,000	75,000		P. T. Ives, H. B. Todd, B. F. Harrison, Comm.
185	Pump to res.	H. R. Worthington	305,722			C. F. Parks, Sup.
676	Gravity . . .		17,500	none		V. C. Wood, Sec., Jno. S. Ells, Sup.
463	Gravity . . .		no returns			Silas Hobbs.
422	no returns					
545	Pump to res.	Knowles Man. Co.	60,000			O. C. Allen, S. & Tr.
453	Pump . . .		no returns			B. B. Martin.
622	Gravity . . .		30,000	none		B. F. Fargo, S. & Tr., J. O. McClure, Eng.
705	Gravity . . .		30,000	11,000	5 1/2	B. F. Vail, Water Com.
12	Gravity . . .		5,500,000			Lieut. R. L. Hoxie, Eng. in Charge.
599	Gravity . . .		no returns			Daniel Vliet, Sec.
123	Gravity . . .		361,884	265,000	4 1/2 7	N. J. Welton, Pres., Welton & Bonnet, En.
633	no returns					
204	Pump to res.	H. R. Worthington, R. D. Wood & Co.	200,000	200,000	4-7	R. Van Namee, Pres., A. Salisbury, Sup.
619	no returns					
635	Gravity . . .		51,885	none		A. White, Sup.
452	Flowing well		3,350			J. F. Powell, Man.
548	Gravity . . .		52,000	30,000	6	J. T. Sawyer, Pres., J. B. Floyd, Sec.
500	Pump to res.	H. R. Worthington	60,000	60,000	6	D. D. Davidson, Sec.



## WES-WOO.

No. in Sta- tistics	No. in His- tory.	Name of Town.	State or Province.	Population, 1880.	Date of Construction of Works.	By whom owned.	Source of Supply.
328		West Bay City	Michigan . . .	6,397		no returns	
620		West Brookfield	Massachusetts	1,917		3 Companies	Springs.
379	344	Westborough	Massachusetts	5,214	1878	Town . .	Surface water.
302	353	West Chester	Pennsylvania .	7,046	1841	Borough	Springs and Surface water.
639		West Cleveland	Ohio . . . . .	1,781		no returns	
284	260	Westfield .	Massachusetts	7,587	1874	Town . .	Surface water.
567		West Pittston	Pennsylvania :	2,544			Supplied from Pittston
446	398	West Springfield	Massachusetts	4,149	1874	Company	Surface water.
170	241	West Troy and Green Island	New York . .	12,980	1876	Company	Mohawk River.
68	415	Wheeling .	West Virginia	30,737	1831	City . .	Ohio River.
432		Whitehall .	New York . .	4,270		Village .	
400		Wichita . .	Kansas . . . .	4,911		in progress	
87	147	Wilkesbarre	Pennsylvania .	23,339	1859	Company	Surface water.
115	47	Williamsport	Pennsylvania .	18,934	1853	2 Companies	Surface water.
716		Wilmington	California . . .	911		no returns	
45	88	Wilmington	Delaware . . .	42,478	1804	City . .	Brandywine Riv.
125	346	Wilmington	North Carolina	17,350	1882	Company	Cape Fear Riv.
473	354	Winchester	Massachusetts	3,802	1873	Town .	Surface water.
398	495	Winchester	Virginia . . .	4,958		City . .	Springs.
798		Windsor . .	Nova Scotia .	3,019		in progress	
325		Windsor . .	Ontario . . . .	6,561		no returns	
652		Windsor . .	Vermont . . . .	1,696		Company	
618	218	Wingham .	Ontario . . . .	1,918	1880	Town . .	Matland River.
727	367	Winnemucca	Nevada . . . .	763	1877	Company	Surface water.
274		Winnipeg .	Manitoba . . .	7,985		no returns	
212	328	Winona . .	Minnesota . .	10,208	1876	City . .	Ground water.
634	165	Winsted . .	Connecticut . .	1,805	1861	Borough	Surface water.
201	299	Woburn . .	Massachusetts	10,931	1873	Town . .	Ground water.
786		Woodburn (now Hillburn)	New York . .	350	1872	Company	Surface water.
589		Woodland .	California . . .	2,257		no returns	



No.	Mode of Supply.	Builders of Pumping Machinery.	Cost of Works.	Bonded Debt.	Rate of Interest	Officers of Works.
328	no returns					
620	Gravity . . .	no returns				
379	Gravity . . .		\$ 53,000	\$53,000	5	R. W. Gould, Clk.
302	Pump to res. H.R. Worthington		100,000	95,000		J. B. Wood, Ch. Bur., Charles Henry, Sup.
639	no returns					
284	Gravity . . .		250,000	250,000	6-7	W. S. Bush, Sup.
567						
446	Gravity . . .		50,000 Capital Stock	none		Goodhue & Birnie, Owners.
170	Pump to res. Vergennes Mach. Co		250,000	150,000 20,000	7 6	Geo. P. Meneely, Pres. Geo. M. Wiswall, Sec., Tr. and Sup.
68	Pump to res. Sweeney & Son H. R. Worthington.		not given			James H. Riddle, Sup.
432	Gravity . . .	no returns				W. G. Stufflebeam, Pres.
400	in progress					
87	Gravity . . .		220,000	17,000		I. S. Osterhout, S. & Tr. John Farrel, Sup.
115	Gravity . . .		not given			J. H. McMinn, Sup. of Citizens Company. James V. Brown, Tr. of Lycoming Company.
716	no returns					
45	Pump to res. H.R. Worthington					H. B. McIntire, Ch. E.
125	Pump to stand- pipe. H.R. Worthington		137,000	80,000	6	John C. Chase, Sup.
473	Gravity . . .		165,000	160,000	7	W. T. Dotton, Sup., Mial Cushman, Reg.
398	Gravity . . .		not given			J. H. Nulton, Sup.
798	in progress					
325	no returns					
652	Gravity . . .	no returns				Hiram Harlow, Sup.
618	Pump direct		8,000	8,000	6	W. W. Inglis, Chr. of Com.
727	Gravity . . .		28,000			J. B. Gramm, Sup.
274	no returns					
212	Pump to stand- pipe. H.R. Worthington		160,000	40,000	7	A. W. Gage, Chr. Com.
634	Gravity . . .		100,000	25,000		H. H. Drake, Sup.
201	Pump to res. H.R. Worthington		522,550	387,293	6-4	Gilman A. Beam, Sup.
786	Gravity . . .		3,500			W. W. Snow, Sup.
589	no returns					



WOO-ZAN.

No. in Sta- tistics	No. in His- tory.	Name of Town.	State or Province.	Population. 1880.	Date of Construction of Works.	By whom owned.	Source of Supply.
368		Woodstock	Ontario . . . .	5,373	no	returns	
352	332	Wooster . .	Ohio . . . . .	5,840	1869	City . . .	Springs and Surface water.
31	32	Worcester .	Massachusetts	58,291	1798 1845	City . . .	Surface water.
497		Yankton . .	Dakota . . . .	3,431	no	returns	
330		Yarmouth .	Nova Scotia .	6,280	no	returns	
116	81	Yonkers . .	New York . .	18,892	1873	City . . .	Surface water.
153	243	York . . . .	Pennsylvania .	13,940	1816	Company	Springs and Surface water.
405	488	Yorkville .	Ontario . . . .	4,825	1853	Town . .	Surface water.
145	439	Youngstown	Ohio . . . . .	15,435	1872	City . . .	Mahoning River
704	252	Yreka . . .	California . . .	1,059	1861	Company	Springs.
119	144	Zanesville .	Ohio . . . . .	18,133	1842	City . . .	Muskingum Riv.
787		Connecticut State Industrial School for Girls	Connecticut .		1882	State . .	Surface water.

The following were received too late for insertion in their regular order :

784	513	PhenixFurnace	New York . .		1865	Company	Surface water.
794	512	Amesville .	Connecticut .	377	1872	Housatonic R. R. Co.	Springs and Housa- tonic River.
795		Durango . .	Colorado . . .		in progress		
796		Portsmouth	Virginia . . . .	11,390	in progress		
799		Cheyenne .	Wyoming . . .	3,456	1882	City . . .	no returns
800		Independence	Missouri . . .	3,146	in progress	City . . .	Missouri River.
801		Woodbury .	New Jersey . .	2,298		Private .	Bored wells.

NOTE.—On page 34, the Jamesburg Reform School (No. 772) is in New Jersey, not in New York.



No.	Mode of Supply.	Builders of Pumping Machinery.	Cost of Works.	Bonded Debt.	Rate of Interest.	Officers of Works.
368	no returns					
352	Gravity . . .		85,000	50,000	7	O. G. Coover, Sec., M. M. Smith, Sup. Frank E. Hall, Water Com., J. S. Brown, Reg., C. A. Allen, Eng.
31	Gravity . . .					
497	no returns					
330	no returns					
116	Pump direct and to reservoir.	H. R. Worthington, Wm. Wright Birkinbine,	702,193	650,000	7	W. W. Wilson, Eng. and Sup.
153	Pump to res.	Baugher, Frey & Kurtz	100,000	none		Jacob L. Kuehn, Sup., Samuel Small, Pres.
405	Pump to res. and pump direct.	H. R. Worthington	100,000			G. Heal, Eng. & Sup.
145	Pump direct	Holly Man. Co.	175,000			Geo. Rudge, Sec., W. S. Hamilton, Sup.
704	Gravity . . .		10,000			Henry Scheld, Man.
119	Pump to res.	H. R. Worthington, Knowles Man. Co.	500,000	300,000		W. O. Munson, Sec., Elias Ebert, Sup.
787	Gravity . . .					C. F. Browning, Man.
784	Gravity . . .		3,000			A. J. Copp, Sup.
794	Gravity and pump to reservoir.					N. Slingland, Sup.
795	in progress					
796	in progress					
799	no returns					
800	Pump to res. in progress					
801	Pump to res.		9,500			G. G. Green, Owner.







Statistics of Water Works,  
arranged according to Population  
of Towns.



No.	Name of Town.	Population, 1880.	Year of Returns.	Expenses.	Receipts.	Daily Consumption, Gallons.
1	New York, N. Y.	1,206,299	Dec., 1882	\$340,000	\$1,647,183	95,000,000
	“ High Ser.		Dec., 1881			11,605,630
2	Philadelphia, Pa.	847,170	Dec., 1882	385,694	1,516,904	67,647,782
3	Brooklyn, N. Y.	566,663	Dec., 1882	337,013	1,188,232	34,616,831
4	Chicago, Ill.	503,185	Dec., 1882	112,953	1,474,127	66,163,942
5	Boston, { Mass. {	362,839	April, 1882	233,777	1,118,661	31,020,000
				78,824	254,359	7,194,700
6	St. Louis, Mo.	350,518	April, 1882	253,629	not given	27,500,000
7	Baltimore, Md.	313,190	Dec., 1882	93,012	637,212	25,000,000
8	Cincinnati, Ohio	255,139	Dec., 1882	212,683	507,279	19,524,847
9	San Francisco, Cal.	233,959	Dec., 1881	329,000	1,300,000	13,824,000
10	New Orleans, La.	216,090	April, 1882	41,000	100,000	9,000,000
11	Cleveland Ohio	160,146	Dec., 1882	65,693	251,994	12,313,804
12	Washington, D. C.	159,871	Dec., 1882	54,173	115,028	26,525,991
13	Pittsburgh, Pa.	156,389	Jan., 1880	85,617	302,085	16,021,624
14	Buffalo, N. Y.	155,134	Dec., 1882	79,106	362,762	22,000,000
15	Montreal, Que.	140,747	Dec., 1882	68,443	414,818	11,480,111
16	Newark, N. J.	136,508	Nov., 1882	114,343	223,368	9,680,160
17	Louisville, Ky.	123,758	Dec., 1881	58,982	216,803	8,655,826
18	Jersey City, N. J.	120,722	Dec., 1882	95,165	434,525	16,212,098
19	Detroit, Mich.	116,340	Dec., 1882	49,060	267,046	17,261,440
20	Milwaukee, Wis.	115,587	Dec., 1882	86,700	167,057	14,690,413
21	Providence, R. I.	104,857	Dec., 1882	45,180	269,318	3,665,000
22	Albany, N. Y.	90,758	Dec., 1881	28,250	39,831	unknown
23	Rochester, N. Y.	89,366	April, 1882	47,792	75,766	4,238,078
24	Toronto, Ont.	86,415	Dec., 1882	67,900	210,000	6,600,000
25	Allegheny, Pa.	78,682	Dec., 1882	25,150	168,000	10,000,000
26	Indianapolis, Ind.	75,056	April, 1882	37,673	70,940	4,000,000
27	Richmond, Va.	63,600	Feb., 1882	32,569	82,748	5,599,315
28	New Haven, Conn.	62,882	Dec., 1882	not given	135,331	6,000,000



X									
No.	Miles of Pipe.	Sizes of Pipe, Inches.	No. of Taps.	Daily Consumption per tap.	No. of Meters.	No. of Fire Hydrants.	Annual Price per Hydrant by City.	X Mains.	X Kind of Pipe, Services.
1	531	48-4	85,160	1,115	6,817	6,944	0	Cast iron.	Lead, tin-lined lead and galvanized iron
			8,607	1,348					
2	773	48-3	136,798	494	49	6,119	0	Cast iron.	Lead
3	358	48-4	64,176	540	1,462	2,970	0	Cast iron.	Lead and galvanized iron
4	497.2		78,840	839	2,312	3,825	0	Cast iron.	Lead
	361.6	48-4	53,655	578	1,631	4,275	0	Cast iron.	Lead.
5	117.7		16,700	431		757	0	Cast iron & cement lined wrought iron.	Lead
6	224.8	36-3	21,745	1,265	905	1,980	0	Cast iron.	Lead
7	290	30-1 1/2	52,876	473	677	892	0	Cast iron.	Cast iron
8	206.8	50-3	24,750	789	780	900	0	Cast iron.	Lead
9	178.3	22-3	23,000	661	5,810	1,396	not decided.	Cast iron.	
10	68.7		5,000	1,800	0	790		Cast iron.	
11	152.9	36-3	14,492	849	704	1,264	0	Cast iron.	Lead and galvanized iron
12	176.3	36-4	20,534	1,291		833	0	Cast iron.	
13	111.1		unknown			912	0	Cast iron.	Lead
14	131.2	36-3	13,379	1,644	140	1,400	0	Cast iron.	Lead and iron
15	133.5	30-1 1/2	26,508	433	364	886	0	Cast iron.	Lead and wrought iron
16	140.4	30-3	12,601	768	242	1,197	0	Cast iron.	Lead
17	115.7	48-2	7,947	1,089	273	365	\$10,000 for all	Cast iron.	Lead and galvanized iron
18	144	36-3	unknown		281	1,415	0	Cast iron.	Lead
19	232	42-2 1/4	23,833	725	30	872	75,457 for all	Cast iron and wood.	Lead
20	99.2	30-3	7,974	1,842	91	794	0	Cast iron.	Lead
21	167.4	36-4	10,357	354	5,279	1,186	33,640 for all	Cast iron.	Lead and tin-lined lead
22	76.5	36-3	unknown		12	500	0	Cast iron.	Lead
23	121.5	24- 3/4	11,225	377	650	1,050	0	Cast iron.	Lead.
24	116	12-3	14,000	471	119	1,118	0	Cast iron.	Lead
25	60		12,492	800	1	860	0	Cast iron.	Lead
26	43	24-3	1,400	2,900	25	600	50	Cast iron.	
27	53.1	30-1 1/2	6,200	903	0	324	0	Cast iron.	Lead
28	100	16-3	no record		11	650	16,000 for all	Cement-lined wrought iron	Wrought iron, some galvaniz'd



No.	Name of Town.	Population, 1880.	Year of Returns.	Expenses.	Receipts.	Daily Consumption. Gallons.
29	Quebec, Que. . . .	62,446	Dec., 1880	\$ 10,000	\$ 90,0000	3,000,000
30	Lowell, Mass. . . .	59,475	Dec., 1882	26,414	140,398	2,629,950
31	Worcester, Mass. . .	58,291	Nov., 1882	23,071	92,007	3,250,000
32	Troy, N. Y. . . . .	56,747	Feb., 1882	41,646	79,609	3,453,296
33	Kansas City, Mo. . .	55,785	Dec., 1882	30,000	no returns	3,450,000
34	Cambridge, Mass. . .	52,669	Dec., 1882	28,870	177,430	2,474,616
35	Syracuse, N. Y. . . .	51,792	Dec., 1882	13,390	71,090	4,700,000
36	Columbus O. . . . .	51,647	Mar., 1882	22,266	54,700	2,660,964
37	Paterson, N. J. . . .	51,031	Dec., 1882	not given	not given	6,000,000
38	Toledo, O. . . . .	50,137	Dec., 1882	19,770	37,394	3,405,718
39	Charleston, S. C. . .	49,984	Jan., 1883	not given	not given	225,000
40	Fall River, Mass. . .	48,961	Dec., 1882	22,165	115,301	1,500,000
41	Scranton, Pa. . . . .	48,850	Dec., 1881	not given	not given	5,000,000
42	Minneapolis, Minn.	46,887	May, 1882	15,000	30,000	3,000,000
43	Nashville, Tenn. . .	43,350	Dec., 1881	52,000	64,000	4,000,000
44	Reading, Pa. . . . .	43,278	Dec., 1881	15,786	68,481	
45	Wilmington, Del. . .	42,478	Dec., 1882	35,499	79,035	4,671,553
46	Hartford, Conn. . . .	42,015	Mar., 1883	20,020	132,882	5,000,000
47	Camden, N. J. . . . .	41,659	Dec., 1881	26,340	65,644	2,111,000
48	St. Paul, Minn. . . .	41,473	1880	not given	not given	1,000,000
49	Lawrence, Mass. . . .	39,151	Dec., 1882	19,702	78,111	1,950,658
50	Dayton, O. . . . .	38,678	Dec., 1882	18,663	23,214	1,182,474
51	Lynn, Mass. . . . .	38,274	Dec., 1882	12,577	93,280	1,510,764
52	Atlanta, Ga. . . . .	37,409	Dec., 1882	17,940	27,414	2,300,000
53	Halifax, N. S. . . . .	36,102	Dec., 1882	10,000	63,000	6,000,000
54	Hamilton, Ont. . . . .	35,961	Dec., 1882	23,000	107,730	2,568,000
55	Denver, Col. . . . .	35,629	Nov., 1882	not given	not given	2,600,000
56	Oakland, Cal. . . . .	34,555	Dec., 1881	not given	202,933	unknown
57	Utica, N. Y. . . . .	33,914	Dec., 1882	6,000	not given	2,000,000
58	Portland, Me. . . . .	33,810	Dec., 1881	15,000	110,000	5,000,000



No.	Miles of Pipe.	Sizes of Pipe. Inches.	No. of Taps.	Daily Con- sumption per Tap.	No. of Meters.	No. of Fire Hydrants.	Annual Price per Hydrant by City.	Kind of Pipe.	
								Mains.	Services.
29	27.5	14-4	5,016	600		222	0	Cast iron	
30	70.6	24-4	6,283	418	1,079	727	0	Cast iron	Wrought iron, tarred
31	85.8	24-2	6,061	542	4,709	690	0	Cast iron and cement-lined wrought iron	Wrought iron, cement-lined
32	41.1	20-1½	3,500	990	455	456	0	Cast iron	Lead
33	42	20-6	2,763	1,250	140	393	\$ 110	Cast iron	
34	85	48-3	7,725	320	156	596		Cast iron and cement-lined wrought iron	Galvanized iron
35			1,847	2,544	42	32	26,000 for all	Cast iron	Lead
36	57.9	20-4	2,288	1,163	546	363	0	Cast iron and wrought iron	Wrought iron
37	48	20-4	3,300	1,818	0	520	37	Cast iron and cement-lined wrought iron	Lead and gal- vanized iron
38	48.5	30-4	1,853	1,838	110	361	0	Cast iron	Lead
39	16	16-4	500	440	1	230	10,000 for all	Cast iron	Lead and gal- vanized iron
40	54.2	24-6	3,120	480	1,960	655	0	Cast iron	Lead
41	29.3		1,047		0	106	3,000 for all	Cast iron	Galvanized iron and lead
42	20.5	16-4	1,530	1,960	6	252	0	Cast iron	Lead
43	48.5	36-2	5,300	754	0	212		Cast iron	Lead and iron
44	no returns	no returns					0		
45	58		8,658	540	3	520	0	Cast iron	
46	73.3	24-3	5,168	967	169	391	30	Cast iron and cement-lined wrought iron	Galvanized iron
47	36.5	30-3	7,070	298	0	285		Cast iron	Lead
48	17.5	12-4	1,817	550	0	188	60	Cast iron and cement-lined wrought iron	Lead
49	45.3	30-1	3,653	534	421	470	40	Cast and wrought iron	Galvanized iron
50	35.9	20-2	1,040	1,137	58	315	0	Cast and wrought iron	Lead
51	65		5,439	277	156	498		Cement-lined wrought iron	Wrought iron, cement-lined
52	17.6	4	1,431	1,607	74	229	0	Cast iron	Wrought iron
53	56	24-3	4,400	1,363	3	317	0	Cast iron	Lead
54	67		8,150	314	3	473	0		Lead
55	40	20-2	3,500	743	0	325	114	Cast iron	Lead
56	123		5,300		102	195	0	Boiler iron, riv- eted, asphalted, cement-lined	Galvanized iron
57	30		1,300	1,538	not given	190	10,000 for all	Cast iron	Lead
58	38.7	16-4	4,983	1,003	45	262		Cast iron and cement-lined wrought iron	Galvanized iron



No.	Name of Town.	Population, 1880.	Year of Returns.	Expenses.	Receipts.	Daily Consumption, Gallo s.
59	Memphis, Tenn. .	33,592	July, 1882	\$ 26,000	\$ 60,000	4,000,000
60	Springfield, Mass. .	33,340	Dec., 1882	19,436	76,137	unknown
61	Manchester, N. H. .	32,630	Dec., 1882	11,506	67,500	1,215,000
62	St. Joseph, Mo. . .	32,431	Nov., 1882	not given	not given	2,500,000
63	Grand Rapids, Mich.	32,016	April, 1882	12,071	20,238	1,156,682
64	St. John and Portland, N.B.	32,000	Dec., 1882	12,844	77,379	10,000,000
65	Hoboken, N. J. . .	31,000	no returns	no returns		
66	Harrisburg, Pa. . .	30,762	Dec., 1881	16,723	50,000	4,750,000
67	St. Johns N. F. . .	30,743	Dec., 1882	4,811	46,870	4,200,000
68	Wheeling, W. Va. .	30,737	Dec., 1882	19,513	52,022	3,000,000
69	Savannah, Ga. . .	30,709	Dec., 1882	14,000	25,000	3,000,000
70	Omaha, Neb. . . .	30,518	Dec., 1881	not given	not given	350,000
71	Trenton, N. J. . .	29,910	Feb., 1882	9,774	47,875	1,275,126
72	Covington, Ky. . .	29,720	Dec., 1882	23,500	25,000	1,500,000
73	Evansville, Ind. . .	29,280	Dec., 1882	36,068	39,689	3,914,082
74	Peoria, Ill. . . .	29,259	Dec., 1881	18,988	24,805	2,000,000
75	Mobile, Ala. . . .	29,132	no returns	no returns		
76	Elizabeth, N. J. . .	28,229	Oct., 1881	35,000	not given	not given
77	Erie, Pa. . . . .	27,737	Dec., 1882	17,513	43,819	2,274,405
78	Bridgeport, Conn. .	27,643	Dec., 1882	25,000	49,000	2,500,000
79	Salem, Mass. . . .	27,563	Dec., 1882	27,126	53,512	2,300,000
80	Ottawa, Ont. . . .	27,412	Nov., 1882	23,916	99,010	3,256,237
81	Quincy, Ill. . . .	27,268	Dec., 1881	not given	not given	750,000
82	Fort Wayne, Ind. .	26,880	Dec., 1882	8,023	10,002	800,000
83	New Bedford, Mass.	26,845	Dec., 1882	23,446	46,766	2,326,352
84	Terre Haute, Ind. .	26,042	Dec., 1882	8,989	30,123	900,000
85	Lancaster, Pa. . .	25,769	Dec., 1881	9,934	38,000	3,000,000
86	Somerville, Mass. .	24,933	Dec., 1881	14,000	14,687	unknown
87	Wilkesbarre, Pa. . .	23,339	Dec., 1882	2,320	15,560	428,860
88	Des Moines, Ia. . .	22,408	Dec., 1882	not given	not given	unknown



No.	Miles of Pipe.	Sizes of Pipe, Inches.	No. of Taps.	Daily Consumption per Tap.	No. of Meters.	No. of Fire Hydrants.	Annual Price per Hydrant by City.	Kind of Pipe, Mains.	Services.
59	35		3,250	1,230	24	200	0	Cast iron	Lead
60	67.8	24-1 1/2	3,757		101	424		Cast iron and cement-lined wrought iron	Wrought iron, tarred
61	38.5	20-4	2,140	568	380	339	\$ 60	Cast iron and cement-lined wrought iron	Wrought iron, rubber-coated
62	24	20-4	553	4,520	27	160 52	100 60	Cast iron	Lead
63	24.7		962	1,202	280	1,296		Cast iron and Wyckoff wood	Lead
64	32.1	15-2	3,733	2,679	127	276	68,100 for all	Cast iron	Wrought iron and lead
65	no returns	no returns							
66	21	20-4	8,000	594	0	25c		Cast iron	Wrought iron
67	9		1,500	2,800	0	124		Cast iron	Lead
68	32.5	30-3	unknown		0	300		Cast iron	Lead
69	24		3,500	857	0	238	0	Cast iron	
70	32	18-4	700	500	0	255		Cast iron	
71	32	16-2	5,338	239	38	185	0	Cast iron	Galvanized iron
72	26	20-4	2,021	744	0	215	0	Cast iron	Lead
73	32	20-4	1,589	2,463	0	238	11,130 for all	Cast iron	Galvanized iron
74	43	16-4	1,645	1,215	6	267	0	Cast iron	
75	no returns	no returns							
76	40	not given	not given		20	200	25	Cement-lined wrought iron	
77	40.8	12-4	3,174	716	20	148	0	Cast iron	Galvanized iron
78	60	20-4	3,500		1	187	7,500 for all	Cement-lined wrought iron and cast iron	Lead and iron
79	44.3	1	4,600	500	134	154	0	Cast iron and cement-lined wrought iron	Galvanized iron
80	44.2	24-3	5,833	558	0	341	35	Cast iron	Lead
81	20	20-4	250	300	7	81	15,400 for all	Cast iron	Lead, enameled and galvanized iron
82	27	24-4	875	914	15	218		Cast iron	Lead
83	45	24-4	4,203	553	41	313	12,000 for all	Cast iron and cement-lined wrought iron	Wrought iron and lead
84	20.1	10-4	590	1,525	3	339	40	Cast iron	Lead
85	32	20-4	3,500	854	2	300	0	Cast iron	Lead and wrought iron
86	45.5		1,227		31	283	1,420 for all	Cement-lined wrought iron	Lead, rubber-coated and enameled iron
87	13	8-3	1,140	385	0	56	20	Cast iron and cement-lined wrought iron	
88	20	16-4	1,687		30	192	52.42	Cast iron	Lead and wrought iron



No.	Name of Town.	Population. 1880.	Year of Returns.	Expenses.	Receipts.	Daily Consumption, Gallons.
89	Dubuque, Ia., . . .	22,254	Dec., 1882	\$6,000	not given	unknown
90	Norfolk, Va., . . .	21,966	June 1882	15,023	\$33,513	810,000
91	Auburn, N. Y., . . .	21,924	1880	not given	not given	2,600,000
92	Holyoke, Mass., . . .	21,915	Dec., 1882	9,005	55,091	2,000,000
93	Augusta, Ga., . . .	21,891	Dec., 1882	8,312	17,333	2,247,085
94	Davenport, Ia., . . .	21,834	Dec., 1882	not given	not given	1,700,000
95	Chelsea, Mass., . . .	21,782	Dec., 1881	4,938	12,211	1,000,000
96	Petersburg, Va., . . .	21,656	Dec., 1881	4,300	8,300	60,000
97	Sacramento, Cal., . . .	21,420	Dec., 1881	25,000	68,500	2,000,000
98	Taunton, Mass., . . .	21,213	Nov., 1882	5,728	34,180	582,111
99	Oswego, N. Y., . . .	21,116	Dec., 1880	not given	not given	unknown
100	Salt Lake City, Utah,	20,768	Nov., 1882	19,521	13,047	400,000
101	Springfield, Ohio, . . .	20,730	July, 1882	works	just completed	unknown
102	Bay City, Mich., . . .	20,693	Dec., 1882	10,511	17,383	2,125,048
103	San Antonio, Tex., . . .	20,550	Dec., 1882	not given	not given	unknown
104	Elmira, N. Y., . . .	20,541	July, 1882	not given	not given	1,400,000
105	Newport, Ky., . . .	20,433	Dec., 1881	13,238	21,861	unknown
106	Poughkeepsie, N. Y.,	20,207	Dec., 1882	15,286	22,083	1,392,616
107	London, Ont., . . .	19,746	Nov., 1882	8,500	25,000	1,250,000
108	Springfield, Ill., . . .	19,743	Dec., 1881	17,126	28,607	1,653,524
109	Altoona, Pa., . . .	19,716	Dec., 1880	not given	not given	500,000
110	Burlington, Ia. . . .	19,450	Dec., 1881	11,446	15,028	943,413
111	Cohoes, N. Y., . . .	19,418	no returns	no returns	no returns	
112	Lewiston, Me., . . .	19,083	Feb., 1882	4,771	24,591	1,016,260
113	Pawtucket, R. I., . . .	19,030	Feb., 1882	12,356	47,043	1,068,905
114	East Saginaw, Mich.,	19,016	Dec., 1882	10,709	14,289	2,166,271
115	Williamsport, Lycoming Co. Pa. Citizens Co.	18,934	April, 1882	not given 2,500	not given 13,000	800,000 unknown
116	Yonkers, N. Y., . . .	18,892	Dec., 1882	12,100	33,401	1,038,000
117	Haverhill, Mass., . . .	18,472	Dec., 1882	not given	not given	1,250,000
118	Lake, Ill., . . . . .	18,380	April, 1882	5,000	30,000	3,000,000



No.	Miles of Pipe.	Sizes of Pipe, Inches.	No. of Taps.	Daily Con- sumption per tap.	No. of Meters.	No. of Fire Hydrants.	Annual Price per Hydrant by City.	Kind of Pipe, Mains. Services.	
89	13	12-4	517		10	100 21	\$75 50	Cast iron	Lead
90	26	12-1 1/2	2,455	330	77	114	3,500 for all	Cast iron	
91	26	12-4	200			253	68.50	Cast iron	
92	27.4	20-4	1,493		105	177	0	Cast iron	
93	21.6	6-4	1,324	1,627	0	175	0	Cast iron	Galvanized iron
94	22	14-4	780	2,179	178	251	70	Cast iron	Galvanized iron
95	28.5	16-3	4,176	240	47	136	1,736 for all	Cement-lined wrought iron and cast iron	Lead
96	12	12-4	not given		0	60	0	Cast iron	Wrought iron
97	25	24-3	4,600	435	0	285	0	Cast and wrought iron	Wrought iron
98	42	20-4	2,062	282	401	367	30	Cast iron	Cement-lined wrought iron
99	25		not given			175	23,500 for all	Cast iron	
100	12.7	20-4	760	526	0	121		Cast iron	
101	30	24-6	250		0	250		Cast iron	Lead and gal- vanized iron
102	20.1		951	2,200	28	140	0	Wyckoff wood and cast iron	
103	15	16-4	1,020		5	139	10,000 for all	Cast iron	Lead, wrought and galvanized iron
104	34	12-4	800	1,750	176	50 96	75 50	Cast iron and Wyckoff wood	Galvanized iron
105	17.7	30-4	1,778		25	110	0	Cast iron	
106	16.7		1,436	970	176	286	0	Cast iron	
107	37	12-4	2,500	500	9	210		Cast iron	
108	19.5	15-4	730	2,265	31	91		Cast iron	
109	16		1,400	357	0	98		Cast iron	
110	20.4	12- 3/4	843	1,119	59	208	3,600 for all	Wrought and cast iron	Wrought iron, enameled
111	no returns						0		
112	23	24-4	1,800	564	25	149	40	Cast iron	Tarred wrought iron and gal- vanized iron
113	75	30-4	2,679	399	1,422	965		Cast iron	Wrought iron, tarred
114	22.3	16-3	816	2,532	0	151	0	Cast iron	
115	24 19	16	1,858 700	431	0 0	159 39	10	Cast iron	
116	24.5	24-4	1,133	916	605	263	30	Cast iron	Lead
117	25	16-4	not given		10	75	0	Cast iron and cement-lined wrought iron	Lead
118	52	16-3	3,000		68	309	0	Cast iron	Lead



No.	Name of Town.	Population, 1890.	Year of Returns.	Expenses.	Receipts.	Daily Consumption, Gallons.
119	Zanesville, Ohio. .	18,133	Dec., 1882	\$ 11,500	\$ 28,000	2,000,000
120	Allentown, Pa. . .	18,063	Dec., 1881	4,427	34,544	800,000
121	Council Bluffs, Ia. .	18,059	in progress			
122	Newburgh, N. Y. . .	18,049	Dec., 1882	28,000	28,819	1,800,000
123	Waterbury, Conn. .	17,806	Dec., 1882	5,728	34,180	unknown
124	Portland, Or. . . .	17,577	no returns			
125	Wilmington, N. C. .	17,350	Nov., 1882	10,000	7,000	100,000
126	Binghamton, N. Y. .	17,315	Dec., 1881	16,233	29,281	2 068,368
127	Bloomington, Ill. . .	17,180	April, 1882	7,203	8,502	500,000
128	New Brunswick, N. J.	17,166	Dec., 1881	14,901	42,754	1,264,000
129	Long Island City, N. Y.	17,129	no returns			
130	Newton, Mass. . . .	16,995	Dec., 1881	12,682	40,993	450,987
131	Bangor, Me. . . . .	16,856	Mar., 1882	7,628	26,843	945,235
132	Montgomery, Ala. . .	16,713	Aug., 1881	not given	not given	unknown
133	Leavenworth, Kan. .	16,546	Dec., 1882	just completed		
134	Houston, Tex. . . .	16,513	Dec., 1881	not given	not given	300,000
135	Akron, Ohio . . . .	16,512	Dec., 1882	not given	not given	1,000,000
136	New Albany, Ind. . .	16,423	Dec., 1882	9,000	30,000	900,000
137	Jackson, Mich. . . .	16,105	Dec., 1882	8,000	9,000	8,500,000
138	Racine, Wis. . . . .	16,031	Dec., 1882	not given		unknown
139	Lynchburg, Va. . . .	15,959	Feb., 1882	7,239	13,498	950,000
140	Sandusky, Ohio. . . .	15,838	Dec., 1881	9,853	13,162	1,478,275
141	Hyde Park, Ill. . . .	15,716	no returns			
142	Newport, R. I. . . .	15,693	June, 1882	20,000	35,000	800,000
143	Meriden, Conn. . . .	15,540	Nov., 1882	5,000	38,500	1,000,000
144	Topeka, Kan. . . . .	15,452	Dec., 1882	works just completed		unknown
145	Youngstown, Ohio. .	15,435	Dec., 1882	9,388	14,026	800,000
146	Norwich, Conn. . . .	15,112	Mar., 1882	5,327	27,999	unknown
147	Atchison, Kan. . . .	15,105	Dec., 1882	not given		350,000
148	Chester, Pa. . . . .	14,997	1875	5,000	26,000	406,000



No.	Miles of Pipe.	Sizes of Pipe, Inches.	No. of Taps.	Daily Consumption per Tap.	No. of Meters.	No. of Fire Hydrants.	Annual Price per Hydrant by City.	Kind of Pipe, Mains. Services.	
119	35	30-2	2,500	800	5	170	0	Cast iron	
120	22	16-2	250	3,200	18	96	0	Cast iron	
121	in progress								
122	21	20-4	1,890	953	10	185	0	Cast iron	
123	31	20-1	2,217		84	180	\$30	Cast iron and cement-lined wrought iron	
124	no returns								
125	11.5	12-4	254	393	32	75 30	70 50	Cast iron	Wrought iron, enameled
126	24	12-4	1,935	1,069	15	175	0	Cast iron and cement-lined wrought iron	
127	14	10-4	600	833	0	150		Cast iron	
128	20	16-4	1,250	1,011	59	166	50	Cast iron and cement-lined wrought iron	Lead and galvanized iron
129	no returns								
130	62.3	24-4	2,196	214	541	344		Cast iron	Wrought iron, tarred
131	24.2		1,577	599	0	155	40	Cast iron	
132	10	10-3	550			103	75	Cast iron	
133	13	18-4	not given		0	81	75	Cast iron	Wrought iron
134	12		350	857	0	80			Galvanized iron
135	22	16-3	925	1,081	10	157	45	Cast iron	
136	17	10-4	927	971	30	100 50	100 75	Cast iron	
137	13	15-4	807	10,533	4	86	0	Cast iron	
138	1	6-4	200		0	5		Cast iron	Lead
139	16	18-3	760	1,250	0	143		Cast iron	
140	21.1	20-1 1/4	1,103	1,340	0	148	0	Cast iron	Wrought iron
141	no returns								
142	40	18-4	1,225	653	12	197		Cast iron and cement-lined wrought iron	Wrought iron, cement-lined
143	25	16-2	2,200	454	65	180	30	Cast iron and cement-lined wrought iron	
144	15	16-4	360		4	152	46.66	Cast iron	Lead and iron
145	15	15-4	822	973	15	111	0	Cast iron	Lead
146	33.5	6-4	1,969		153	257	0	Cement-lined wrought iron	
147	8.5	12-4	450	777	7	54	6,000 for all	Cast iron	Wrought iron
148	12	12-4	1,100	369		57	40	Cast iron	



No.	Name of Town.	Population, 1880.	Year of Returns.	Expenses.	Receipts.	Daily Consumption, Gallons.
149	Lafayette, Ind. . . .	14,860	Dec., 1882	\$ 7,000	\$ 12,000	700,000
150	Leadville, Col. . . .	14,820	1880	12,402	30,723	1,000,000
151	La Crosse, Wis. . . .	14,505	Dec., 1882	6,500	4,000	800,000
152	Kingston, Ont., . . .	14,091	Nov., 1882	8,325	19,000	750,000
153	York, Pa. . . . .	13,940	1880	not given		unknown
154	Concord, N. H. . . .	13,836	Dec., 1881	2,299	25,431	750,000
155	Central Falls, R. I. . .	13,765			supplied from Pawtucket.	
156	Alexandria, Va. . . .	13,659	April, 1881	6,858	5,954	803,468
157	Schenectady, N. Y. . .	13,655	Mar., 1882	not given		1,000,000
158	Brockton, Mass. . . .	13,608	Dec., 1881	1,902	3,613	unknown
159	Newburyport, Mass.	13,538	no returns			unknown
160	Lockport, N. Y. . . .	13,522	Dec., 1882	not given		1,200,000
161	Nashua, N. H. . . . .	13,397	1880	10,000	30,000	1,000,000
162	Pittsfield, Mass. . . .	13,364	April, 1882	2,168	16,856	2,000,000
163	South Bend, Ind. . . .	13,280	July, 1882	4,500	6,000	800,000
164	Pottsville, Pa. . . . .	13,253	Dec., 1882	not given		unknown
165	Orange, N. J. . . . .	13,207	in progress			
166	Little Rock, Ark. . . .	13,138	Dec., 1882	not given		unknown
167	Rockford, Ill. . . . .	13,129	May, 1882	894	10,319	917,288
168	Norristown, Pa. . . . .	13,063	Dec., 1881	not given		800,000
169	Lincoln, Neb. . . . .	13,003	in progress			
170	West Troy and Green Island, N. Y.	12,980	Dec., 1882	17,000	18,000	1,000,000
171	Chattanooga, Tenn.	12,892	Dec., 1882	not given		1,000,000
172	Macon, Ga. . . . .	12,749	Oct., 1882	2,460	6,320	175,000
173	New Brighton, N. Y.	12,679	Aug., 1882	10,922	20,859	500,000
174	Biddeford, Me. . . . .	12,652	for fire protection			
175	San Jose, Cal. . . . .	12,567	no returns			
176	Fitchburg, Mass. . . .	12,405	Dec., 1881	5,713	15,640	1,500,000
177	Canton, Ohio. . . . .	12,258	no returns			
178	Rome, N. Y. . . . .	12,194	Dec., 1882	3,000	11,000	1,000,000



No.	Miles of Pipe.	Sizes of Pipe, Inches.	No. of Taps.	Daily Consumption per Tap.	No. of Meters.	No. of Fire Hydrants.	Annual Price per Hydrant by City.	Mains.	Kind of Pipe, Services.
149	28		836	837	6	220	\$ 25	Cast iron	
150	3		250	4,000	2	52		Cast iron	Lead
151	8.5	16-4	425	1,882	0	85		Cast iron	Galvanized iron
152	10	8-3	816	917	20	42		Cast iron	Lead
153		10-2	1,500			50		Cast iron	Lead
154	26.3	14- $\frac{3}{4}$	1,731	489	15	107	50	Cement-lined wrought iron	Cement-lined wrought iron
155									
156	15.9		573	1,407		147		Cast iron	
157	11	12-4	500	2,000	20	132	71.88	Cement-lined wrought iron	
158	9	16-4	385		86	127	25	Cement-lined wrought iron	Wrought iron & cement-lined wrought iron
159	no returns								
160	7.5	12-4	600	2,000	2	150	0	Cast iron	Wrought iron
161	23	10-4	1,600	625		75	5,700 for all	Cast iron	
162	31		1,600	125	1	82	30	Cast iron	
163	17		600	1,333	30	300	0	Wyckoff wood and cast iron	
164	35	16-3	not given				0	Cast iron	Galvanized iron and lead
165			in progress						
166	8.5	14-4	not given			85	85	Cast iron	Wrought iron and lead
167	29	20-2	1,080	849	0	189		Cast iron	Wrought iron and lead
168	27	16-3	2,500	320	0	85	0	Cast iron	
169			in progress						
170	15	10-4	300	3,333	1	110	500 for all	Cast iron	Lead
171	15		1,000	1,000	0	50	55		
172	9.6	12-4	216	856	104	53	60	Cast iron	Galvanized iron
173	15.2	10-4	450	1,111	8	152	40	Cast iron	Wrought iron
174	no returns								
175	no returns								
176	26		1,255	1,195	93	203	0	Cement-lined wrought iron and cast iron	Cement-lined wrought iron
177	no returns							Cement-lined wrought iron and cast iron	
178	16		652	1,534	0	130	0	Cement-lined wrought iron	



No	Name of Town.	Population, 1880.	Year of Returns.	Expenses.	Receipts.	Daily Consumption, Gallo s.
179	Northampton, Mass.	12,172	Feb., 1882	\$ 1,567	\$ 18,846	500,000
180	Keokuk, Ia. . . .	12,117	Dec., 1882			600,000
181	Steubenville, Ohio .	12,093	Dec., 1881	20,474	16,750	1,300,000
182	Malden, Mass. . . .	12,017	June, 1882	4,325	34,301	480,000
183	Easton, Pa. . . . .	11,924	Dec., 1881	10,000	23,500	1,000,000
184	New Britain, Conn. .	11,800	April, 1882	3,018	16,627	3,000,000
185	Waltham, Mass. . . .	11,712	Dec., 1881	4,984	25,133	449,390
186	Dover, N. H. . . . .	11,687	Dec., 1882 Two other	4,000 companies	7,000 send no	unknown returns
187	Danbury, Conn. . . .	11,669	Dec., 1882	1,192	13,977	1,500,000
188	Rock Island, Ill. . .	11,659	Dec., 1882	6,350	20,250	1,800,000
189	Joliet, Ill. . . . .	11,657	no returns			
190	Charlestown, Mass. .	11,514	May, 1882	paid by Boston	109,678	
191	Galesburg, Ill. . . .	11,437	no returns			
192	Burlington, Vt. . . .	11,365	Dec., 1882	7,627	22,407	593,881
193	Portsmouth, Ohio. .	11,321	Aug., 1882	11,596	13,881	1,900,000
194	Muskegon, Mich. . . .	11,264	no returns			
195	Logansport, Ind. . . .	11,198	Mar., 1882	3,000	6,900	500,000
196	Los Angeles, Cal. . .	11,183	Dec., 1882	not given		1,500,000
197	Attleboro, Mass. . . .	11,111	May, 1882	2,764	3,097	unknown
198	Hannibal, Mo. . . . .	11,074	Feb., 1882	6,843	19,036	301,210
199	Austin, Tex. . . . .	10,960	no returns			
200	Chillicothe, Ohio. . .	10,938	no returns			
201	Woburn, Mass. . . . .	10,931	May, 1882	8,291	27,534	772,578
202	Jacksonville, Ill. . .	10,927	April, 1882	5,432	8,000	252,000
203	Virginia City, Nev. . .	10,917	May, 1882	not given		4,200,000
204	Watertown, N. Y. . . .	10,697	Dec., 1881	not given		900,000
205	Cumberland, Md. . . .	10,693	Jan., 1883	5,132	6,834	1,500,000
206	New London, Conn. . .	10,537	Sept., 1882	2,875	17,417	unknown
207	Saginaw City, Mich. .	10,525	Dec., 1882	10,067	3,500	1,000,000
208	Dallas, Tex. . . . .	10,358	Oct., 1882	5,000	12,000	145,000



No.	Miles of Pipe.	Sizes of Pipe, Inches.	No. of Taps.	Daily Con- sumption per Tap.	No. of Meters.	No. of Fire Hydrants.	Annual Price per Hydrant by City.	Kind of Pipe.	
								Mains.	Services.
179	24.1	24- 1/2	1,259	396	1	139		Cast iron	
180	12.1		430	1,395	15	87	† \$100		
181	13.8	20-2	2,100	619	0	125		Cast iron	Lead
182	36.8	16-4	2,468	195	29	198		Cement-lined wrought iron	Lead
183	20	20-3	1,200	833	20	50	0	Cast iron	Wrought iron
184	25	12-4	1,350	2,222	56	153	25	Cement-lined wrought iron	Wrought iron and cast iron
185	24.1	16-4	not given		8		25	Cast iron and cement-lined wrought iron	
186	12		not given		8	0			
187	25	10-3	1,500	1,000	0	110	0	Cement-lined wrought iron	
188	15.7	20-4	926	1,944		106	5,250 for all	Cast iron	Lead and wrought iron
189	no returns								
190	29.5		6,208		188	260		Cement-lined wrought iron	
191	no returns								
192	20	10-3	1,785	332	90	148	1,200	Cement-lined wrought iron	Galvanized iron and lead
193	18	16-4	1,220	1,557	0	90	0	Cast iron	Wrought iron
194	20		no returns				0	Cast iron	Wrought iron
195	9.5		400	1,250	6	89		Cast iron	Lead
196	26	22-1 1/2	1,726	869	0	60	0	Cast iron and cement-lined wrought iron	Galvanized iron
197	5.5	8-4	350		97	73	† 22	Cement-lined wrought iron	Cement-lined wrought iron
198	13.2	14-2	660	456	12	75 13	66 2/3 60	Cast iron and wrought iron	
199	no returns								
200	no returns								
201	36.2	14-2	1,413	547	23	271	25	Cement-lined wrought iron	Cement-lined wrought iron & enameled iron
202	11		380	607	124	78	0	Cast iron	
203	11	4-1	2,000	2,100	0	92	† 60	Cast iron	
204	16		1,200	750	0	110	2,500 for all	Cast iron and cement-lined wrought iron	
205	24	12-3	1,200	1,235	0	106	0	Cast iron	
206	22.5	16-4	1,371		24	118	0	Cement-lined wrought iron	Rubber Coated wrought iron & cement-lined wrought iron
207	9	16-4	325	3,077	0	133	0	Wyckoff wood and cast iron	Lead and iron
208	10	10-4	500	250	3	73	† 60	Cast iron	Wrought iron



No.	Name of Town.	Population, 1880.	Year of Returns.	Expenses.	Receipts.	Daily Consumption, Gallons.
209	Ogdensburg, N. Y. .	10,341	April, 1882	\$2,000	\$10,000	1,000,000
210	Madison, Wis. . .	10,324	Dec., 1882	works just built		
211	Stockton, Cal. . .	10,282	no returns			
212	Winona, Minn. . .	10,208	Dec., 1881	6,500	1,900	400,000
213	North Adams, Mass.	10,191	Sept., 1882	not given		
214	Shenandoah, Penn. .	10,147	no returns			
215	Marlborough, Mass.	10,127	in progress			
216	Columbus, Ga. . .	10,123	in progress			
217	Cedar Rapids, Ia. .	10,104	April, 1882	7,063	15,877	550,000
218	Columbia, S. C. . .	10,040	no returns			
219	Three Rivers, Que. .	10,000	Mar., 1882	12,000	14,000	150,000
220	Guelph, Ont. . . .	9,890	Dec., 1882	4,387	7,072	214,000
221	Mansfield, Ohio. . .	9,859	Oct., 1882	5,204	6,716	600,000
222	Knoxville, Tenn. .	9,693	in progress			
223	Portsmouth, N. H. .	9,690	not given			800,000
224	St. Catherines, Ont.	9,631	May, 1882	2,868	4,246	not given
225	Brantford, Ont. . .	9,616	Oct., 1882	2,310	9,127	150,000
226	Sedalia, Mo. . . .	9,561	Feb., 1882	9,000	9,445	500,000
227	Auburn, Me. . . .	9,556	Sept., 1882	2,500	11,000	240,000
228	Decatur, Ill. . . .	9,548	Dec., 1882	8,629	6,256	250,000
229	Bayonne, N. J. . .	9,372	no returns	supplied from Jersey City		
230	Jamestown, N. Y. .	9,357	Nov., 1882	not given		unknown
231	Jeffersonville, Ind. .	9,357	in progress			
232	Milford, Mass. . .	9,310	Dec., 1882	not given		unknown
233	Amsterdam, N. Y. .	9,303	in progress			
234	Bradford, Pa. . . .	9,197	May, 1882	5,000	7,500	unknown
235	Ithaca, N. Y. . . .	9,105	Dec., 1882	not given	6,410	unknown
236	Stillwater, Minn. .	9,055	June, 1882	3,396	16,554	1,210,000
237	Clinton, Ia. . . .	9,052	1878	5,000	not given	500,000
238	Titusville, Pa. . .	9,046	Mar., 1882	9,053	8,414	904,000



No.	Miles of Pipe.	Sizes of Pipe. Inches.	No. of Taps.	Daily Con- sumption per tap.	No. of Meters.	No. of Fire Hydrants.	Annual Price per Hydrant by City.	Kind of Pipe.	
								Mains.	Services.
209	15		1,100	909	0	90	0	Cement-lined wrought iron	
210	12	16-4	60		0	86		Cast iron	Lead
211	no returns								
212	8	16-4	300	1,333	0	90	0	Cast iron	Plain and gal- vanized iron
213	18		not given			110		Cast iron	
214	no returns								
215	10	16-6				133		Cast iron	
216	no returns								
217	8	16-4	375	1,467	0	76	\$75-100	Cast iron	Lead and wrought iron
218	no returns						0		
219	14	9-4	1,700	88	2	53		Cast iron	Cast iron
220	13	12-4	266	804	4	101	20	Cast iron	Lead
221	17	16-4	657	913	0	115	0	Cast iron	Wrought iron
222	in progress								
223	not given							Wyckoff wood	
224	15.5	12-4	546		0	123	0	Cast iron	Iron
225	4.5	8-4	60	2,500	0	56		Cast iron.	Cast iron
226	8	12-4	575	870	4	38	10	Cast iron	Wrought iron
227	10	12-3	800	300	0	16		Cast iron	Galvanized iron and enameled iron
228	97		385			100	0	Cast iron	
229	no returns								
230	13	16-4	175		3	100	60	Cast iron	Wrought iron tarred
231	in progress								
232	10.2	14-4	150		0	60 9	46.66 30.00	Cast iron	Lead
233	in progress								
234	4.5	4-2	350		0	13	0	Wrought iron	Wrought iron
235	10		500		9	35	75	Cast iron	Lead and gal- vanized iron
236	8.4		220	5,500	0	85	7,000 for all	Cast iron	
237	8.5	16-4	300	1,666		85	† 100	Cast iron	
238	9	15-4	625	1,446	7	65		Cast iron	Wrought iron



No.	Name of Town.	Population. 1880.	Year of Returns.	Expenses.	Receipts.	Daily Consumption, Gallons.
239	Peabody, Mass. . . .	9,028	Dec., 1882	\$3,010	\$17,504	1,086,359
240	Ottumwa, Ia. . . .	9,018	Dec., 1882	not given		1,000,000
241	Alton, Ill. . . .	8,978	Dec., 1881	3,600	not given	250,000
242	Madison, Ind. . . .	8,945	June, 1882	5 000	6,000	400,000
243	Port Huron, Mich. . .	8,883	April, 1882	7,436	12,474	575,967
244	Meadville, Pa. . . .	8,860	Dec., 1881	4,000	16,000	402,000
245	Ironton, Ohio. . . .	8,857	Dec., 1882	5,000	9,000	1,088,000
246	Elgin, Ill. . . .	8,787			in progress	
247	Lebanon, Pa. . . .	8,778	Dec., 1882	not given		unknown
248	Bridgeton, N. J. . . .	8,722	Feb., 1882	1,495	6,832	147,750
249	Port Jervis, N. Y. . .	8,678	no returns			
250	Hudson, N. Y. . . .	8,670	Sept., 1882	10,000		1,068,750
251	Augusta, Me. . . .	8,666	no returns			
252	Frederick, Md. . . .	8,659	Aug., 1882	not given		403,200
253	Freeport, Ill. . . .	8,516	Dec., 1882	Works just completed.		unknown
254	Middletown, N. Y. . .	8,494	Oct., 1882	1,506	10,637	unknown
255	Natick, Mass. . . .	8,479	Dec., 1881	3,925	11,299	213,000
256	Fremont, Ohio. . . .	8,451			in progress	
257	Saratoga, N. Y. . . .	8,421	Mar., 1880	7,459	25,378	1,178,818
258	New Castle, Pa. . . .	8,418	Dec., 1882	not given		140,000
259	Johnstown, Pa. . . .	8,380	no returns			
260	St. Thomas, Ont. . . .	8,367	Dec., 1882	1,300	800	80,000
261	East Orange, N. J. . .	8,349	Dec., 1882	Works just completed.		
262	Danville, Pa. . . .	8,346	May, 1882	Fire pur- poses only.		unknown
263	Columbia, Pa. . . .	8,312	no returns			
264	Muscatine, Ia. . . .	8,295	Jan., 1881	5,000	7,000	132,800
265	McKeesport, Pa. . . .	8,212	Dec., 1882	2,600	3,200	80,000
266	Hornellsville, N. Y. . .	8,195	Jan., 1883	Just completed.		unknown
267	Shamokin, Pa. . . .	8,184	no returns			
268	Kalamazoo, Mich. . .	8,057	April, 1882	6,701	5,889	741,575



No.	Miles of Pipe.	Sizes of Pipe. Inches.	No. of Taps.	Daily Consumption per Tap.	No. of Meters.	No. of Fire Hydrants.	Annual Price per Hydrant by City.	Kind of Pipe.	
								Mains.	Services.
239	4.6	16-2	not given			130		Cast and galvanized iron	
240	10	16-4	427	2,342	10	84	\$82.50	Cast iron	Wrought iron
241	12	6	132	1,894	51	89	100	Cast iron	
242	8	12-4	600	667	0	106	0	Cast iron	Wrought iron
243	18.5	16-3	1,050	548	0	109	0	Cast iron and Wyckoff wood	Lead
244	15.5		800	502	3	100	† 60	Cast iron	
245	8.5	12-4	965	1,127	0	114	0	Cast iron	
246	in progress								
247	9		1,324		0	62	0	Cast iron	
248	11.5	16-2	493	298	0	77	38	Cast iron	Galvanized iron
249	no returns						† 15		
250	14.0	18-1½	1,021	1,046	0	181	0	Cast iron	
251	no returns						† 25	Wyckoff wood	
252	not given						0	Cast iron	
253	9	16-4	not given			84		Cast iron	
254	6	12-4	546		6	40	0	Wyckoff wood, cast iron and cement-lined wrought iron	
255	22	12-4	837	254	19	122	0	Cement-lined wrought iron	Galvaniz'd iron. cement-lined wrought iron
256	In progress								
257	17.2	12-3	1,346			113	0	Cast iron	
258	12.8	12-4	200	700	3	104	0	Cast iron	Lead
259	no returns						† 500		
260	4.5		76		0	40			
261	11	12-4	91		25	102	60	Cast iron	Lead
262	4	10-4				40		Cast iron and wood	
263	no returns								
264	5		300	443	20	50	† 75	Cast iron	
265	9	12-4	206	388	10	66		Cast iron	
266	13	16-4	200		0	123	30	Cast iron	Galvanized iron and wrought iron
267	no returns						† 12	Wyckoff wood	
268	16.7	16-2	1,237	599	7	155		Cast iron	



No	Name of Town.	Population, 1880.	Year of Returns.	Expenses.	Receipts.	Daily Consumption, Gallo.us.
269	Brookline, Mass. .	8,053	July, 1882	\$ 8,000	\$ 14,199	477,113
270	Clinton, Mass. . .	8,030	Dec., 1882	just finished		
271	Bellaire, Ohio . . .	8,025	Dec., 1882	4,000	11,000	1,000,000
272	Appleton, Wis. . . .	8,005	in progress			
273	Flushing, N. Y. . . .	8,000	no returns			
274	Winnipeg, Man. . . .	7,985	no returns			
275	Tiffin, Ohio, . . . .	7,879	Dec., 1882	not given		273,000
276	Beverly, Mass. . . .	7,865	supplied from Salem			
277	Ottawa, Ill. . . . .	7,834	no returns			
278	Moline, Ill. . . . .	7,800	Dec., 1882	not given		unknown
279	Carbondale, Pa. . . .	7,714	Feb., 1882	not given		unknown
280	Millville, N. J. . . .	7,660	Feb., 1882	not given		unknown
281	Jacksonville, Fla. . .	7,650	July, 1882	4,170	4,195	250,000
282	Flatbush, N. Y. . . .	7,634	no returns			
283	Rockland, Me. . . . .	7,599	Dec., 1881	not given		unknown
284	Westfield, Mass. . . .	7,587	April, 1882	13,00	9,281	unknown
285	Medford, Mass. . . . .	7,573	Jan., 1883	3,888	17,613	unknown
286	Danville, Va. . . . .	7,526	no returns			
287	Rutland, Vt. . . . .	7,502	June, 1882	2,500	11,751	800,000
288	Pittston, Pa. . . . .	7,472	Dec., 1882	7,300	18,000	480,000
289	Marblehead, Mass. . .	7,467	fire protection			unknown
290	Spencer, Mass. . . . .	7,466	Dec., 1882	in progress		
291	Michigan City, Ind.	7,366	no returns			
292	Oil City, Pa. , . . . .	7,315	April, 1882	not given		unknown
293	Sheboygan, Wis. . . .	7,314	fire protection			
294	Waco, Tex. . . . .	7,295	July, 1882	4,000	12,000	250,000
295	Dunkirk, N. Y. . . . .	7,248	Oct., 1882	7,300	5,600	900,000
296	St. Albans, Vt. . . . .	7,193	Mar., 1882	not given		600,000
297	Mahanoy City, Pa. . .	7,181	Feb., 1882	not given		unknown
298	Gloversville, N. Y. . .	7,133	Dec., 1882	1,500	6,000	600,000



No.	Miles of Pipe.	Sizes of Pipe. Inches.	No. of Taps.	Daily Con- sumption per Tap.	No. of Meters.	No. of Fire Hydrants.	Annual Price per Hydrant by City.	Kind of Pipe.	
								Mains.	Services.
269	28.5	16-2	1,013		0	164	\$ 25	Cast iron	Lead
270	11	16-6				70		Cast iron	Cement-lined wrought iron
271	9.5	12-3	900	1,111	0	76	0	Wyckoff wood and cast iron	
272	no returns								
273	no returns								
274	no returns								
275	15	16-4	400	482	0	98 4	90 75	Cast iron and wrought iron	Wrought iron
276	Supplied	from	Salem						
277	no returns								
278	2.5	8-6	120		0	47	50	Cast iron	Wrought iron
279	2	10-3	290		0	30	25	Cement-lined wrought iron and cast iron	Galvanized iron
280	10	12-4	236		0	66	37	Cast iron	Lead
281	8.5	6	240	1,042	158	102		Cast iron	
282	no returns								
283	33					10		Cement-lined wrought iron	
284	21	14-4	787		0	116		Cast iron	
285	33.3	10-2	1,371		9	155	4,500 for all	Cement-lined wrought iron	Galvanized iron and cement- lined iron
286	no returns						† 40		
287	15		1,500	533	1	52			
288	15	12-2	1,200	400	1	27	15	Cast iron	Galvanized iron and lead
289	1.2	10	not given			20		not given	
290	5	14-4	not given		0	30	50	Cement-lined wrought iron	Iron
291	no returns								
292	12	12-4	not given		3	90	† 5,000 for all	Cast iron	Lead and gal- vanized iron
293	Fire pro- tection								
294	9	12-3	536	466	70	35		Cast iron	Wrought iron
295	14	35-12	510	1,765		95	0	Cast iron	
296	14		500	1,200	5	54		Wrought iron	Galvanized iron
297	4.2	6-3	720		0	17	10	Cast iron	
298	10	12-4	500	1,200	0	60		Cast iron	Wrought iron, lead and gal- vanized iron



No.	Name of Town.	Population, 1880.	Year of Returns.	Expenses.	Receipts.	Daily Consumption. Gallons.
299	Iowa City, Ia. . .	7,123		no returns		
300	Charlotte, N. C. . .	7,094	July, 1882	not given		unknown
301	Plymouth, Mass. . .	7,093	Dec., 1881	9,885	\$ 11,520	454,535
302	West Chester, Pa. . .	7,046	July, 1882	not given	11,000	200,000
303	Joplin, Mo. . . .	7,038	Dec., 1882	5,600	12,000	200,000
304	Tucson, Ar. . . .	7,007	no returns			
305	Chicopee, Mass. . .	7,000	Nov., 1882	1,500	6,300	unknown
306	Frankfort, Ky. . .	6,958	May, 1882	not given		unknown
307	Hazleton, Pa. . .	6,935		no returns		
308	Manistee, Mich. . .	6,930	in progress			
309	Harrison, N. J. . .	6,898		in progress		
310	Peekskill, N.Y. . .	6,893	Dec., 1882	2,678	5,431	400,000
311	Chambersburg, Pa. .	6,877	Dec., 1882	3,000	5,000	500,000
312	Massillon, Ohio. .	6,836	no returns			
313	Middletown, Conn. .	6,826	Dec., 1882	13,496	17,826	800,000
314	Peterboro, Ont. . .	6,812	Dec., 1882	just finished		unknown
315	Lancaster, Ohio. .	6,803	June, 1882	9,934	38,000	3,000,000
316	Keene, N. H. . . .	6,784	Dec., 1882	995	9,376	unknown
317	Phoenixville, Pa. .	6,682	Mar., 1882	2,557	10,739	unknown
318	Fort Worth, Tex. .	6,668	no returns			
319	Staunton, Va. . . .	6,664	Dec., 1882	4,600	10,000	600,000
320	Annapolis, Md. . .	6,642	Sept. 1882	10,955	16,210	250,000
321	Danvers, Mass. . .	6,636	April, 1882	6,562	11,205	400,000
322	Santa Fe, N. M. . .	6,635	no returns			
323	Hagerstown, Md. .	6,627	no returns			
324	Lakeview, Ill, . . .	6,565	no returns			
325	Windsor, Ont. . . .	6,561	no returns			
326	Passaic, N. J. . . .	6,532	June, 1882	not given		500,000
327	Rahway, N. J. . . .	6,455	July, 1882	6,514	7,113	651,140
328	West Bay City, Mich.	6,397	no returns			



No.	Miles of Pipe.	Sizes of Pipe. Inches.	No. of Taps.	Daily Con- sumption per Tap.	No. of Meters.	No. of Fire Hydrants.	Annual Price per Hydrant by City.	Kind of Pipe. Mains.	Services.
299	no returns								
300	5	12-4	30		0	40	\$ 50	Cast iron	Lead
301	19.8	10-2	1,106	415		54		Cement-lined wrought iron	Wrought iron and cement- lined wrought iron
302	11	12-4	1,000	200	0	90		Cast iron	Lead
303	13	12-3	500	400	7	60	5,000 for all	Cast iron	Wrought iron
304	no returns								
305	10	8	800		0	32	500 for all	Cast iron and vit- rified stoneware and cement-lined wrought iron	Lead
306		4-3	500		0	0		Cast iron	Lead and iron
307	no returns								
308	in progress								
309	in progress								
310	9.9	4	428	934	19	78	0	Cast iron	
311	7		500	1,000	0	45			
312	no returns								
313	17.8	12-3	1,050	762	7	85	25	Cement-lined wrought iron and cast iron	Galvanized iron
314	4	12-5	20		0	6	0	Cast iron	Lead
315	6	20-4	100		0	61		Cast iron	Lead and wrought iron
316	25	2	933		0	121		Cast iron and wrought iron	
317	10.2	24	4,904		54	362	0	Cement-lined wrought iron and cast iron	
318	no returns								
319	6	12-3	unknown		3	30		Cast iron	Wrought iron
320	7.5	10-4	500	500	0	30	10	Cement-lined wrought iron	Galvanized iron
321	29.2	12-4	881	454	20	196	25	Cement-lined wrought iron	Cement-lined wrought iron
322	no returns								
323	no returns								
324	no returns								
325	no returns								
326	9.5	12-4	250	2,000	0	83	30	Cement-lined wrought iron	Lead
327	12.3		430	1,514	0	122	0	Cement-lined wrought iron	
328	no returns							Wyckoff wood	



No.	Name of Town.	Population, 1880.	Year of Returns.	Expenses.	Receipts.	Daily Consumption, Gallons.
329	Martinsburg, W. Va.	6,335	Dec., 1882	\$ 1,500	\$ 2,550	190,000
330	Yarmouth, N. S. . .	6,280			no returns	
331	Urbana, O. . . .	6,253	Oct., 1882	3,600	10,868	450,000
332	Marshalltown, Ia. .	6,240	Dec., 1882	6,478	15,088	477,000
333	Owensboro, Ky. . .	6,231	June, 1882	not given	14,000	250,000
334	Dedham, Mass. . .	6,224	no returns			
335	Fredericton, N. B. .	6,218	in progress			
336	Carlisle, Pa. . . .	6,209	Nov., 1882	1,808	5,367	125,000
337	La Porte, Ind. . .	6,195	no returns			
338	Alpena, Mich. . . .	6,153	Mar., 1882	not given		85,000
339	Athens, Ga. . . .	6,099	in progress			
340	Burlington, N. J. .	6,090	Jan., 1882	3,388	9,244	143,011
341	Ogden, Utah, . . .	6,069	no returns			
342	Plymouth, Pa. . .	6,065	no returns			
343	Ashland, Pa. . . .	6,052	June, 1882	1,590	3,840	unknown
344	Ishpeming, Mich. .	6,039	no returns			
345	Piqua, Ohio, . . .	6,031	July, 1882	not given		180,000
346	Mount Vernon, N. Y.	6,000	in progress			
347	Las Vegas, N. M. .	6,000	Dec., 1882	3,000	9,000	unknown
348	Vallejo, Cal. . . .	5,987	Feb., 1882	10,000	25,000	300,000
349	Rockville, Conn. .	5,902	no returns			
350	Geneva, N. Y. . .	5,878	April, 1882	not given		unknown
351	Lockhaven, Pa. . .	5,845	June, 1882	1,150	6,500	unknown
352	Wooster, Ohio, . .	5,840	June, 1882	400	1,300	200,000
353	Sorel, Q. . . . .	5,791	Dec., 1882	2,400	7,440	120,000
354	Leominster, Mass .	5,772	May, 1882	2,689	15,875	unknown
355	Norwich, N. Y. . .	5,756	Mar., 1882	not given		unknown
356	Tamaqua, Pa. . . .	5,730	no returns			
357	Alameda, Cal. . .	5,708	May, 1882	not given		250,000
358	Norwalk, Ohio. . .	5,704	Mar., 1881.	4,384	4,134	523,696



No.	Miles of Pipe.	Sizes of Pipe, Inches.	No. of Taps.	Daily Con- sumption per Tap.	No. of Meters.	No. of Fire Hydrants.	Annual Price per Hydrant by City.	Kind of Pipe.	
								Mains.	Services.
329	6	12-1 1/2	600	317	0	42	0	Cement lined wrought iron	Wrought iron
330	no returns								
331	9	14-4	378	1,190	2	78	\$ 75	Cast iron	Lead
332	9.2	12-2	429	1,105	1	78	2,000 for all	Cast iron	
333	8	10-4	400	625	0	76	50	Cast iron	Lead and gal- vanized iron
334	no returns								
335	in progress								
336	12	8-3	550	227	0	61	250 for all	Cast iron	Lead
337	no returns								
338	10	16-4	500	170	0	86		Wyckoff wood	
339	no returns								
340	15	24-2	1,038	137	0	87		Cast iron and wood	Lead
341	no returns								
342	no returns								
343	3	8-3	450		0	30		Cast iron	Lead and wrought iron
344	no returns								
345	9	12-4	450	400	0	60	0	Cast iron	Galvanized iron
346									
347	12	8-4	300		0	30	80	Cast iron	Cast iron
348	18	12-1 1/2	950	316	0	40	0	Cast iron and wrought iron	Galvanized iron
349	no returns								
350	4	10-4	300		0	24	60	Cast iron	Iron
351	15	12-3	700		0	60	0	Cement-lined wrought iron	Galvanized iron
352	8.5	12-4	220	909	0	88	0	Cast iron	
353	11	8-1 1/2	1,168	102		48	0	Cast iron and wrought iron	Lead
354	18.2	12-2	652		1	115	50	Cement-lined wrought iron	Cement-lined wrought iron
355	33.5	12-4	1,969		153	257	36	Cast iron	Wrought iron
356	no returns						0		
357	30	10-4	300	833	0	56		Cast iron	Galvanized iron
358	14		354		0	84	0	Cast iron	



No.	Name of Town.	Population, 1880.	Year of Returns.	Expenses.	Receipts.	Daily Consumption, Gallons.
359	Galion, Ohio. . .	5,635	no returns			
360	Port Hope, Ont. . .	5,585	no returns			
361	East Liverpool, Ohio.	5,568	Feb., 1882	\$ 5,000	\$ 7,000	200,000
362	Mankato, Minn. . .	5,550	Dec., 1882	2,500	not given	unknown
363	Wakefield, Mass. . .	5,547	no returns			
364	Owego, N. Y. . .	5,525	Nov., 1882	not given		200,000
365	Atlantic City, N. J.	5,477	no returns			
366	Chambersburg, N. J.	5,437	supplied from Trenton			
367	Morristown, N. J. . .	5,418	July, 1882	4,000	13,000	225,000
368	Woodstock, Ont. . .	5,373	no returns			
369	Henderson, Ky. . .	5,365	April, 1882	2,500	5,500	150,000
370	Gloucester, N. J. . .	5,347	in progress			
371	St. Hyacinthe, Q. . .	5,321	no returns			
372	Norwalk, Conn. . .	5,308	no returns			
373	Pottstown, Pa. . .	5,305	Dec., 1881	3,971	7,451	155,000
374	Peru, Ind. . . . .	5,280	May, 1880	4,873	3,845	213,000
375	Bristol, Pa. . . . .	5,273	Dec., 1882	2,400		160,233
376	Mt. Vernon, Ohio. . .	5,249	Sept., 1882	not given		unknown
377	Plattsburg, N. Y. . .	5,245	Dec., 1881	3,031	15,231	500,000
378	Maysville, Ky. . .	5,220	no returns			
379	Westborough, Mass.	5,214	Feb., 1882	1,786	3,119	unknown
380	Bethlehem, Pa. . .	5,193	April, 1882	5,000	3,600	unknown
381	Streator, Ill. . . . .	5,157	Dec., 1882	not given		unknown
382	Dunmore, Pa. . . . .	5,151	no returns			
383	Bowling Green, Ky.	5,114	Nov., 1882	4,000	7,000	200,000
384	Beaver Falls, Pa. . .	5,104	Oct., 1881	1,000	not given	30,000
385	Sterling, Ill. . . . .	5,087	fireprotection			
386	Lindsay, Ont. . . . .	5,080	July, 1882	not given		unknown
387	Salem, N. J. . . . .	5,056	Dec., 1882	not given		100,000
388	Silver Cliff, Col. . .	5,040	no returns			



No.	Miles of Pipe.	Sizes of Pipe. Inches.	No. of Taps.	Daily Con- sumption per Tap.	No. of Meters.	No. of Fire Hydrants.	Annual Price per Hydrant by City.	Kind of Pipe. Mains.	Services.
359	no returns								
360	no returns						0		
361	6	10-4	700	286	3	75		Cast iron	Lead
362	2.6	12-4	11		0	30			
363	no returns								
364	10.5	12-2	248	807	0	51	\$50	Cast iron and wrought iron	Lead and wrought iron
365	no returns								
366	Supplied	from	Trenton						
367	14	6-3	700	321	75	71	17	Cast iron	Lead, galvan- ized iron and cast iron
368	no returns								
369	7.5	12-3	347	432	0	47	0	Cast iron	Galvanized iron
370	in progress								
371	no returns								
372	no returns						0		
373	8	12-4	623	248	5	60	for 500 all	Cast iron	Lead
374	11.8	16-4	130	1,639	0	101		Cast iron	
375	3	12-4	330	485	0	0		Cast iron	Lead
376	4	12-4	300		0	20		Cast iron	Lead
377	15	unknown			0	65	0		
378	no returns								
379	3.5	12-4	256		40	57	25	Cast iron	Wrought iron
380	4	8-3	350		0	75		Cast iron	
381	0.6	not given		fire pro- tection.		8		Wyckoff wood	
382	no returns						0		
383	6	8-2	500	400	0	100		Cast iron	Lead and gal- vanized iron
384	6	not given			0	32		Cast iron	
385	0.5	fire protection				15			
386	not given	8-6	no returns						
387	9	12-4	unknown		0	56		Cast iron	Lead and gal- vanized iron
388	no returns								



No	Name of Town.	Population, 1880.	Year of Returns.	Expenses.	Receipts.	Daily Consumption, Gallons.
389	Kenosha, Wis. . .	5,039	Dec., 1882	\$975	\$3,717	275,000
390	Moncton, N. B. . .	5,032	no returns			
391	St. Charles, Mo. . .	5,014	Mar., 1882	not given		unknown
392	Johnstown, N. Y. . .	5,013	April, 1879	not given		unknown
393	Franklin, Pa. . . .	5,010	no returns			
394	Fredericksburg, Va.	5,010	Nov., 1882	not given		unknown
395	Carleton, N. B. . .	5,000	no returns			
396	Gardner, Mass. . .	4,988	no returns			
397	Huntsville, Ala. . .	4,977	Dec., 1881	2,125	2,110	not given
398	Winchester, Va. . .	4,958	May, 1882	650	3,000	unknown
399	South Bethlehem, Pa.	4,925	April, 1882	760	3,633	unknown
400	Wichita, Kan. . . .	4,911	in progress			
401	Glens Falls, N. Y. .	4,900	Dec., 1882	700	5,000	unknown
402	Turners Falls, Mass.	4,876	no returns	in progress		
403	Grand Haven, Mich.	4,861	June, 1882	1,500	350	50,000
404	Batavia, N. Y. . . .	4,846	Feb., 1882	not given		unknown
405	Yorkville, Ont. . . .	4,825	Dec., 1882	not given		200,000
406	Evanston, Ill, . . .	4,820	Dec., 1881	4,500	not given	300,000
407	Columbus, Ind. . . .	4,813	Oct., 1881	not given		unknown
408	Perth Amboy, N. J.	4,808	Dec., 1882	not given		60,000
409	Elyria, Ohio. . . . .	4,777	May, 1882	not given		350,000
410	Claremont, N. H. . .	4,704	no returns			
411	Marquette, Mich. . .	4,690	no returns			
412	Alliance, O. . . . .	4,636	in progress			
413	Emporia, Kan. . . .	4,632	Feb., 1882	not given		unknown
414	Mount Holly, N. J.	4,621	May, 1882	2,616	4,739	250,000
415	Oskaloosa, Ia. . . .	4,598	no returns			
416	Conshohocken, Pa.	4,561	Oct., 1881	not given		unknown
417	Melrose, Mass. . . .	4,560	Mar., 1882	2,849	14,548	unknown
418	Middletown Ohio. .	4,538	Dec., 1882	675	3,000	15,000



No.	Miles of Pipe.	Sizes of Pipe, Inches.	No. of Taps.	Daily Con- sumption per tap.	No. of Meters.	No. of Fire Hydrants.	Annual Price per Hydrant by City.	Kind of Pipe.	
								Mains.	Services.
389	3	6-3	380	724	0	26	\$ 33 $\frac{1}{3}$	Cast iron	Lead, galvan- ized iron and wrought iron
390	no returns								
391	7.5	12-6	200		0	40	100	Cast iron	
392	4.6	10-4	109		0	53		Cast iron	
393	no returns						† 33 $\frac{1}{3}$		
394	4		225		0	unkn'wn		Cast iron	Lead
395	no returns								
396	no returns								
397	4	8-3	200			20	0	Cast iron	
398	25		550		0	25	† 300		
399	5	8-3	200		0	56	15	Cast iron	Lead
400	no returns								
401	15	12-4	500		7	75	0	Cement-lined wrought iron	Wrought iron and lead
402	no returns								
403	1		30	1,633	0	8		Wyckoff wood	
404	5	8-5	250		0	43	1,000 for all	Cast iron	
405	8	10-4	not given			76		Cast iron	Lead
406	12		400	750	0	80	0	Cast iron	
407	4	10-3	180		0	52	0	Cast iron	
408	6.7		106	566	0	61			
409	9		200	1,750	3	50	60	Cast iron	Galvanized iron
410	no returns								
411	no returns								
412									
413	12	10-2	187		0	43	0	Cast iron	
414	6	6-3	375	667	1	45	5	Cast iron	
415	no returns								
416	4.3	6	200		0	40	† 17.81	Cast iron	
417	16.3	6-2	1,006		0	89	2,000 for all	Cement-lined wrought iron	Enameled iron
418	12	14-4	283	53	6	100	5,440 for all	Cast iron	Lead



No.	Name of Town.	Population, 1880.	Year of Returns.	Expenses.	Receipts.	Daily Consumption, Gallons.
419	Gold Hill, Nev. . .	4,531	See	Virginia City.		
420	Hingham, Mass. . .	4,485	Feb., 1882	not given		unknown
421	Brattleboro, Vt. . .	4,471	no returns			
422	Warren, Ohio, . .	4,428	no returns			
423	Owen Sound, Ont. .	4,426	Mar., 1882	not given		50,000
424	Sherbrooke, Q. . .	4,402	Nov., 1881	not given		240,000
425	Paris, Ill. . . . .	4,373	Aug., 1881	not given		unknown
426	Litchfield, Ill. . .	4,326	April, 1882	not given		unknown
427	Marysville, Cal. . .	4,321	no returns			
428	Catskill, N. Y. . .	4,320	in progress			
429	Easthampton, Mass.	4,316	no returns			
430	St. Johns, Q. . . .	4,314	no returns			
431	Amherst, Mass. . .	4,298	Nov., 1882	not given		unknown
432	Whitehall, N. Y. . .	4,270	no returns			
433	Bordentown, N. J. .	4,258	April, 1882	not given		250,000
434	Hackensack, N. J. .	4,248	no returns			60,000
435	Carson City, Nev. .	4,229	no returns			
436	Colorado Springs, Col.	4,229	Dec., 1882	\$ 2,000	\$ 12,000	unknown
437	Eureka, Nev. . . . .	4,207	May, 1882	35,000	not given	15,000
438	Niles, Mich. . . . .	4,197	Nov., 1882	not given		250,000
439	Malone, N. Y. . . .	4,193	Feb., 1882	not given	6,000	unknown
440	College Point, N. Y.	4,192	Dec., 1882	5,000	8,000	350,000
441	Ludington, Mich. . .	4,190	Dec., 1882	works not completed		50,000
442	Ionia, Mich. . . . .	4,190	Feb., 1882	450	1,100	unknown
443	Lambertville, N. J.	4,183	Aug., 1881	1,454	2,379	unknown
444	Carthage, Mo. . . .	4,167	Oct., 1882	not given		150,000
445	Everett, Mass. . . .	4,159	May, 1882	Paid by Boston.	8,818	
446	West Springfield, Mass.	4,149	Oct., 1882	not given		unknown
447	Goshen, Ind. . . . .	4,123	Dec., 1882	2,000	1,100	unknown
448	Arlington, Mass. . . .	4,100	Dec., 1881	1,130	9,568	unknown



No.	Miles of Pipe.	Sizes of Pipe. Inches.	No. of Taps.	Daily Con- sumption per Tap.	No. of Meters.	No. of Fire Hydrants.	Annual Price per Hydrant by City.	Kind of Pipe.	
								Mains.	Services.
419	See Virginia City								
420	20	14-2	500		0	75	\$ 1,500 for all	Cement-lined wrought iron	
421	no returns								
422	no returns								
423	6	10-6	175	222	0	20	50	Cast iron	Lead
424	5	8-4	160	1,500	0	40	1,400 for all	Cast iron	
425	6.5		unknown		0	56		Cast iron	
426	5		300		0	35		Cast iron	
427	no returns								
428	in progress								
429	no returns						0		
430	no returns								
431	12	12-4	200		0	30	1,000 for all	Cement-lined wrought iron	Lead
432	no returns								
433	5	6-3	375	666	10	38	16	Cast iron	
434	4	no returns					† 30	Cast iron	
435	no returns								
436	11	8-4	900		0	48		Cast iron	Wrought iron
437	15	6-6	500	30	1	20	0	Cast iron	Wrought iron
438	8	12-4	300	833	0	50	50	Cement-lined wrought iron	Wrought iron tarred
439	7.7	6-1	250		0	17	10	Cement-lined wrought iron	
440	14	12-6	449	779	52	54	0	Cast iron	Lead and gal- vanized iron
441	4.5	10-4	60	833	0	40	80	Wood	Lead and iron
442	1.1	10-4	100		0	8		Cast iron	
443	3.7	8	50		0	28	18	Cast iron	
444	7	10-4	213	704	0	50	60	Cast iron	Wrought iron
445	14.5		913		8	69			
446	8	16-6	275		0	14	72	Cement-lined wrought iron	Cement-lined wrought iron
447	4	12-4	100			48	0	Wyckoff wood	Lead and gal- vanized iron
448	14	12-4	588		0	98	10	Cast iron and cement-lined wrought iron	Cement-lined wrought iron



No	Name of Town.	Population, 1880.	Year of Returns.	Expenses.	Receipts.	Daily Consumption. Gallons.
449	Lyons, Ia. , . . .	4,095	Dec., 1882	\$ 1,200	\$ 3,800	180,000
450	Salem, Ohio. . . .	4,041	Dec., 1882	not given		unknown
451	Nevada City, Cal. .	4,022	no returns			
452	Waukegan, Ill. . . .	4,012	Jan., 1882	not given		unknown
453	Warren, R. I. . . .	4,007	no returns			
454	Southbridge, Mass.	4,000	Dec., 1882	not given		unknown
455	Columbus, Miss. . .	3,955	Dec., 1882	1,150	900	25,000
456	Kenton, Ohio. . . .	3,940	Dec., 1882	2,387	3,523	unknown
457	Negaunee, Mich. . .	3,931	no returns			
458	Lee, Mass. . . . .	3,930	Dec., 1882			unknown
459	Concord, Mass. . . .	3,922	Oct., 1881	700		unknown
460	Greenfield, Mass, .	3,903	April, 1882	1,485	7,032	100,000
461	Marion, Ohio. . . .	3,899	no returns			
462	Santa Cruz, Cal. . .	3,898	Dec., 1882	3,000	9,600	250,000
463	Warren, Mass. . . .	3,889	no returns			
464	Rome, Ga. . . . .	3,877	Dec., 1882	4,000	5,000	150,000
465	Sarnia, Ont. . . . .	3,874	Jan., 1882	2,636	4,184	280,000
466	Clarksville, Tenn. .	3,860	Dec., 1882	not given		unknown
467	Ansonia, Conn. . . .	3,855	no returns			
468	Painesville, Ohio. .	3,841	Dec., 1882	works just completed		
469	Long Branch, N. J.	3,833	no returns			
470	Sidney, Ohio. . . . .	3,823	Mar., 1882	300	560	8,000
471	Lyons, N. Y. . . . .	3,820	Mar., 1882	not given	400	unknown
472	Towanda, Pa. . . . .	3,814	in progress			
473	Winchester, Mass. .	3,802	Mar., 1883	2,000	10,000	100,000
474	Deadwood, Dak. . .	3,783	no returns			
475	Mauch Chunk, Pa.	3,752	Dec., 1881	750	not given	unknown
476	Nantucket, Mass. . .	3,727	Dec., 1882	1,400	3,400	40,000
477	South Norwalk, Conn.	3,726	July, 1882	not given		unknown
478	Renovo, Pa. . . . .	3,708	Dec., 1881	100	2,200	unknown



No.	Miles of Pipe.	Sizes of Pipe, Inches.	No. of Taps.	Daily Con- sumption per Tap.	No. of Meters.	No. of Taps by Hydrants.	Annual Price per Hydrant by City.	Kind of Pipe. Mains.	Services.
449	3	2	100	1,800	1	37	† \$ 100	Cast iron and wrought iron	
450	4		275		0				
451	no returns								
452	3	6			0	15	0	Cast iron	
453	no returns								
454	2.2	12-4	50		0	17	for 300 all	Cast iron	Wrought iron
455	1.5	6	85	293	0	18		Cast iron	
456	5	16-4	100		0	42	100	Cast iron	Lead
457	no returns								
458	5	10-1	35		0	4		Cement lined wrought iron	Wrought iron & cement-lined wrought iron
459	7		300		0	50		Cast iron and cement-lined wrought iron	
460	12.5	8-3	534	187	2	41	0	Cast iron	Galvanized iron
461	no returns								
462	18	12-4	500	500	0	45	0	Wrought iron	Wrought iron
463	no returns								
464	5		400	375	2	6	0	Cast iron	
465	9.2	12-4	528	530	0	74	0	Cast iron	Lead
466	5.5	8-4	151		3	40	50	Cast iron	Lead and wrought iron
467	no returns						† 28		
468	6	12-4			0	50	60	Cast iron	Wrought iron
469	no returns								
470	5	12-4	150	53	0	40		Cast iron	Lead and wrought iron
471	1.5	6-2	100		0			Cast iron	Iron
472	in progress								
473	16	12-4	554	180	2	75	† 15	Cement-lined wrought iron	
474	no returns								
475	4	10-2	430		0	28	† 10	Cast iron	
476	6.6	8-2	296	135	0	31		Cast iron	Lead
477	9	12-2	not given		1	58	† 30	Cast iron	Lead, iron and brass
478	15	13-10	265		0	29		Cement-lined wrought iron	Lead and wrought iron



No	Name of Town.	Population. 1880.	Year of Returns.	Expenses.	Receipts.	Daily Consumption, Gallons.
479	Bloomsburg, Pa. . .	3,702	April, 1882	not given		46,925
480	New Castle, Del. . .	3,700	Dec., 1881	\$2,500	\$8,000	450,000
481	Atlantic, Ia. . . .	3,662	Dec., 1882	not given		unknown
482	New Brighton, Pa. . .	3,653	Aug., 1882	1,092	not given	500,000
483	Dansville, N. Y. . .	3,625	May, 1882	not given		unknown
484	Santa Rosa, Cal. . .	3,616	no returns			
485	Walla Walla, W. T. . .	3,588	Dec., 1882	1,800	not given	unknown
486	Fort Dodge, Ia. . .	3,586	Dec., 1882	1,700	1,300	unknown
487	Hot Springs, Ark. . .	3,554	Nov., 1882	not given		unknown
488	Big Rapids, Mich. . .	3,552	Mar., 1882	not given		264,000
489	Decorah, Ia. . . .	3,529	Dec., 1882	not given		unknown
490	Geneseo, Ill. . . .	3,522	Dec., 1882	not given		unknown
491	Conemaugh, Pa. . .	3,498	no returns			
492	Fayetteville, N. C. . .	3,485	no returns			
493	Susquehanna, Pa. . .	3,467	Oct., 1881	55	600	unknown
494	Truro, N. S. . . .	3,461	June, 1882	800	650	unknown
495	Santa Barbara, Cal. . .	3,460	Dec., 1882	3,000	not given	200,000
496	Brazil, Ind. . . .	3,441	no returns			
497	Yankton, Dak. . . .	3,431	no returns			
498	Columbia, Tenn. . .	3,400	May, 1882	1,080	2,136	50,000
499	Logan City, Utah. . .	3,396	Mar., 1882	100	300	5,000
500	Wellsville, Ohio. . .	3,377	Nov., 1882	not given	not given	unknown
501	Butte, Mont. . . .	3,364	no returns			
502	St. Johnsbury, Vt. . .	3,360	Dec., 1882	1,000	2,200	216,000
503	Torrington, Conn. . .	3,327	Dec., 1882	500	3,900	150,000
504	Petaluma, Cal. . . .	3,326	Dec., 1882	4,000	13,000	300,000
505	Niagara Falls, N. Y. .	3,320	Dec., 1882	2,628	5,998	500,000
506	Chico, Cal. . . . .	3,300	no returns			
507	Brandon, Vt. . . .	3,280	Dec., 1882	0	1,534	unknown
508	Joliet, Q. . . . .	3,268	no returns			



No.	Miles of Pipe	Sizes of Pipe Inches.	No. of Taps.	Daily Con- sumption per tap.	No. of Meters.	No. of Fire Hydrants.	Annual Price per Hydrant by City.	Kind of Pipe.	
								Mains.	Services.
479	5.5	10-2	175	268	0	42	\$ 28	Cast iron	Galvanized iron
480	8.5	12-4	507	887	0	40	0	Cast iron	Lead
481	5.5	not given			0	60			
482	15.3	10-3	450	1,111	8	151	50	Cast iron	Lead
483	3	10-4	not given		0	50	0	Wyckoff wood	
484									
485	8	10-3	250		0	0		Riveted wrought iron	Wrought iron
486	1.9	10-4	63		0	25		Cast iron	Lead and wrought iron
487	6	12-6	250		0	40	100	Cast iron	Lead and iron
488	3.5	8-4	209	1,263	0	25	0	Cast iron	Lead
489	1.3	8-6	7		0	14		Cast iron	Wrought iron
490	0.3		23		0	12		Cast iron	Wrought iron
491	no returns								
492	no returns								
493	0.7		700		0	5		Galvanized iron	
494	5	8-4	160		0	32		Cast iron	Lead and wrought iron
495	8	6-2	400	500	0	13	0	Cast iron and wrought iron	Galvanized & asphalted iron
496	no returns						0		
497	no returns								
498	6	3	250	200	1	2	0	Cast iron	Wrought iron
499	2	10-4	11	454	0	13		Cast iron and wood	Galvanized iron
500	6	8-1	400		0	42		Cast iron and wrought iron	Lead
501	no returns								
502	9.5	12-4	300	270	0	77	0	Cast iron	Wrought iron
503	6	12-6	150	1,000	0	25	0	Cast iron	Enameled wrought iron
504	10		670	448	0	17	0	Cast iron and riveted wrought iron	Wrought iron
505	5	10-4	340	1,471	0	34	† 50	Cast iron	
506	no returns								
507	8	12-6	200		0	35		Cast iron	Galvanized iron
508	no returns								



No.	Name of Town.	Population, 1880.	Year of Returns.	Expenses.	Receipts.	Debt, 1881.
509	Minersville, Pa. . .	3,249	Dec., 1882	\$1,500	\$5,500	unknown
510	Connersville, Ind. . .	3,228	May, 1882	not given	1,000	unknown
511	Thomaston, Conn. . .	3,225	Dec., 1882.	not given		unknown
512	Lewistown, Pa. . .	3,222	no returns			
513	Pueblo, Col. . . .	3,217	Feb., 1882	6,000	11,000	367,000
514	Princeton, N. J. . .	3,209	in progress			
515	Marion, Ind. . . .	3,182	Dec., 1882	not given		330,000
516	Paris, Ont. . . .	3,173	no returns			
517	Orange, Mass. . . .	3,169	no returns			
518	Butler, Pa. . . .	3,163	no returns			
519	Hallowell, Me. . . .	3,154	no returns			
520	Hollidaysburg, Pa. .	3,150	Dec., 1881	228	not given	unknown
521	Ripon, Wis. . . .	3,117	in progress			
522	Salina, Kan. . . .	3,111	no returns			
523	Somerville, N. J. . .	3,105	Aug., 1882	not given		260,000
524	Birmingham, Ala. .	3,086	Sept., 1881	1,200	not given	100,000
525	Boulder, Col. . . .	3,069	Dec., 1882	1,600	5,000	unknown
526	Catasauqua, Pa. . .	3,065	Dec., 1882	500	2,500	200,000
527	Archbald, Pa. . . .	3,049	no returns			
528	Farmington, N. H. .	3,044	no returns			
529	Sycamore, Ill. . . .	3,028	Dec., 1882	Fire pro- tection.		unknown
530	Tarrytown, N. Y. .	3,025	May, 1882	not given		unknown
531	Mechanicsburg, Pa.	3,018	no returns			
532	Wallingford, Conn. .	3,017	Dec., 1882	works just completed		
533	Bellefonte, Pa. . .	3,015	Dec., 1882	3,800	4,500	300,000
534	Ballston Spa, N. Y. .	3,011	Dec., 1882	1,500	4,500	5,000
535	Oneonta, N. Y. . .	3,002	Dec., 1882	works just completed		
536	Palestine, Tex. . . .	2,997	Dec., 1882	not given		150,000
537	Fort Edward, N. Y. .	2,988	no returns			
538	Brampton, Ont. . . .	2,920	Dec., 1882	not given		75,000



No.	Miles of Pipe.	Size of Pipe, Inches.	No. of Pipes.	Daily Con- sumption per Pipe.	No. of Meters.	No. of Fire- Hydrants.	Annual Price per Hydrant by City.	Kind of Pipe, Meters, Services.	
509	8.5		1,000		0	40			
510	3	8-4	175		0	65	0	Cast iron	Lead
511	6	12-1	140		0	33	\$ 18	Cast iron and wrought iron	Galvanized iron
512	no returns						0		
513	8	8-4	465	789	0	75		Cast iron	Galvanized iron and lead
514	in progress							Cast iron	Lead
515	6	12-4	250	1,320		44		Cast iron	Galvanized iron
516	no returns								
517	no returns								
518	no returns								
519	no returns								
520	8	5-3	not given		0	45		Wyckoff wood	
521	in progress								
522	no returns								
523	6.5	12-3	180	1,388	0	42	28	Cast iron	Lead
524	6.5	8	200	500	0	15	66.7	Cast iron	
525	7	10-3	540		0	38	† 75	Cast iron	Galvanized iron and lead
526	3.5	12-8	303	660	0	42	12.5	Cast iron	Lead
527	no returns						† 20		
528	no returns						0		
529	1		3		0	10	0		
530	2.5	8-4	not given			15		Cast iron	
531	no returns								
532	6.8	8-4	not given		0	53		Cast iron	
533	not given	6-2	unknown			40	0	Cast iron	Wrought iron and galvanized iron
534	10.5		400	12	0	61	0		
535	5.5	10-4	130		0	40	750 for all	Cast iron	Wrought iron and lead
536	8		127	1,181	2	25	100	Cast iron	Galvanized iron
537	no returns								
538	3		50	1,500	0	40			



No.	Name of Town.	Population. 1880.	Year of Returns.	Expenses.	Receipts.	Daily Collection. G. M.
539	Golden, Col. . . .	2,916	Dec., 1882	\$4,000	\$4,100	10,000
540	Charleston, Ill. . .	2,867	Dec., 1882	2,000	3,000	unknown
541	Crestline, Ohio. . .	2,848	Dec., 1882	600	1,600	unknown
542	Orangeville, Ont. . .	2,847	no returns			
543	Gettysburg, Pa. . .	2,814	Oct., 1882	not given	1,000	unknown
544	Dover, Del. . . .	2,811	Sept., 1882	not given		unknown
545	Warren, Pa. . . .	2,810	Dec., 1882	just completed		
546	Prairie du Chien, Wis.	2,777	June, 1882	100	650	unknown
547	Lexington, Va. . . .	2,771	Dec., 1882	300	74	50,000
548	Waverly, N. Y. . . .	2,767	Feb., 1882	not given		250,000
549	Coatesville, Pa. . .	2,766	Dec., 1882	475	2,500	120,000
550	Potsdam, N. Y. . . .	2,762	Dec., 1882	391	1,889	unknown
551	Ellenville, N. Y. . .	2,750	Dec., 1882	584	977	
552	South Hadley Falls, Mass.	2,750	Mar., 1882	450	3,000	unknown
553	Great Barrington, Mass.	2,715	Oct., 1881	not given		unknown
554	Bodie, Cal. . . . .	2,712	Dec., 1882	3,000	7,500	10,000
555	Fargo, Dak. . . . .	2,693	Dec., 1882	not given		200,193
556	Fredonia, N. Y. . . .	2,692	no returns			
557	Tyrone, Pa. . . . .	2,678	no returns			
558	Mishawaka, Ind. . . .	2,640	June, 1882	not given		unknown
559	San Diego, Cal. . . .	2,637	June, 1882	not given		80,000
560	Central City, Col. . .	2,626	no returns			
561	Kittaning, Pa. . . .	2,624	no returns			
562	Corning, N. Y. . . .	2,623	Dec., 1881	not given		250,000
563	Honesdale, Pa. . . .	2,620	Dec., 1882	1,600	3,000	120,000
564	Asheville, N. C. . . .	2,616	in progress			
565	Menomonie, Wis. . . .	2,589	no returns			
566	Goshen, N. Y. . . . .	2,557	July, 1882	2,300	2,600	unknown
567	West Pittston, Pa. . .	2,544	supplied from Pittston			
568	Stamford, Conn. . . .	2,540	Dec., 1882	not given		unknown



No.	Miles of Pipe.	Sizes of Pipe, Inches.	No. of Taps.	Daily Con- sumption per Tap.	No. of Meters.	No. of Fire Hydrants.	Annual Price per Hydrant by City.	Kind of Pipe.	
								Mains.	Services.
539	6	12-4	250	40	0	27	0	Cast iron	Lead
540	6		250		1	30			
541	10		100		0	28	0	Wyckoff wood	
542	no returns								
543	2		150		0	4			
544	2.5		not given		0	28			
545	12	14-4	175		1	49	\$1,000 for all	Cast iron	
546	0.3		12		0	7	22	Cast iron	
547	3	3	400	125	0	9	0	Cast iron	
548	5		90	2,777	0	28			
549	4.7	12-4	411	292	0	52	0	Cast iron	Lead
550	4		245		0	42	0	Cement-lined wrought iron	
551	3.7	8-4	177		0	40	0		
552	6		250		0	45			
553	3		225		0	21			
554	1		12	835	0	10			
555	6.5	12-2	206	971	7	48	100	Cast iron	Lead and iron
556	no returns								
557	no returns						† 2		
558	2		not given		0	15	0		
559	6		300	267	51	5			
560	no returns						† 40		
561	no returns								
562	5	12-4	250	1,000	19	40	0	Cast iron	
563	8		350	343	0	8			
564	no returns								
565	no returns							Wyckoff wood	
566	6.5	12-4	231		0	46	0	Cast iron	Lead
567	Supplied	from	Pittston			15	15	Cast iron	Galvanized iron and lead
568	16	16-4	625		0	62	† 31.25	Cement-lined wrought iron	Galvanized iron



No.	Name of Town.	Population, 1880.	Year of Returns.	Expenses.	Receipts.	Daily Consumption, Gallons.
569	Salem, Or. . . . .	2,538	Dec., 1882	\$3,001	\$5,595	1,400,000
570	Salamanca, N. Y. . .	2,531	Dec., 1882	none	1,000	unknown
571	Hackettstown, N. J. .	2,502	Aug., 1882	359	4,391	200,000
572	Swampscott, Mass. . .	2,500	supplied from Lynn			
573	Raton, N. M. . . . .	2,500	Dec., 1882	not given		unknown
574	Seaforth, Ont. . . . .	2,480	no returns			
575	Union City, Ind. . . .	2,478	no returns			
576	Suspension Bridge, N. Y.	2,476	no returns			
577	Frostburg, Md. . . . .	2,471	Dec., 1882	350	1,700	23,000
578	Adams, Mass. . . . .	2,388	Dec., 1882		7,000	800,000
579	Mount Carmel, Pa. . .	2,378	no returns			
580	Abilene, Kan. . . . .	2,360	Dec., 1882	1,680	2,700	unknown
581	Stockbridge, Mass. . .	2,357	Oct., 1881	246	900	unknown
582	Niagara Falls, Ont. . .	2,347	Dec., 1882	200	1,400	90,000
583	Hanover, Pa. . . . .	2,317	June, 1882	2,835	963	30,000
584	Agawam, Mass. . . . .	2,316	Sept., 1882	not given	540	unknown
585	Allegan, Mich. . . . .	2,305	Jan., 1882	1,198	1,265	25,000
586	Mitchell, Ont. . . . .	2,284	no returns			
587	San Rafael, Cal. . . .	2,276	Dec., 1882	26,432	33,334	unknown
588	Cheboygan, Mich. . . .	2,269	Dec., 1882	just finished		
589	Woodland, Cal. . . . .	2,257	no returns			
590	San Luis Obispo, Cal.	2,243	no returns			
591	The Dalles, Or. . . . .	2,232	April, 1882	3,000	7,800	600,000
592	Bellows Falls, Vt. . . .	2,229	May, 1882	1,060	4,125	unknown
593	Trinidad, Col. . . . .	2,226	April, 1882	6,000	10,000	100,000
594	Cadillac, Mich. . . . .	2,213	no returns			
595	Fair Haven, Vt. . . . .	2,211	June, 1882	594	1,558	unknown
596	Lansford, Pa. . . . .	2,206	no returns			
597	Cooperstown, N. Y. . .	2,199	not given			250,000
598	Attica, Ind. . . . .	2,150	Dec., 1882	1,200	1,000	100,000



No.	Miles of Pipe.	Sizes of Pipe. Inches.	No. of Taps.	Daily Con- sumption per Tap.	No. of Meters.	No. of Fire Hydrants.	Annual Price per Hydrant by City.	Kind of Pipe.	
								Mains.	Services.
569	7.7	6-3	250	5,600	0	34		Cast iron	Galvanized iron
570	3	10-4	50		0	20		Cast iron	
571	10	10-3	260	770	0	40		Cast iron	Galvanized iron
572									
573	2	6-2	not given					Cast iron	
574	no returns								
575	no returns						0	Wyckoff wood	
576	no returns						0		
577	3.5	8-4	180	121	0	20		Cast iron	
578	8	12-4	800	1,000	14	125		Cast iron	Wrought iron
579	no returns								
580	1	10-6	not given		0	17	\$ 100	Cast iron	Lead and iron
581	3.5	4-1	95		0	5		Cast iron	
582	3	6-3	200	450	0	6	75	Cast iron	Wrought iron
583	6	8-4	253	119	1	26	5	Cast iron	Cast iron
584	3.5	6-4	45		0	0		Cement-lined wrought iron	Galvanized iron
585	4	12-4	200	125	0	36		Cast iron	Wrought iron
586	no returns								
587	15	8- 1/2	450		10	22	0	Cast iron and wrought iron	Wrought iron
588	3	just finished				22		Wyckoff wood	
589	no returns								
590	no returns								
591	1.5	8-4	400	1,500	0	6	100	Cast iron	Wrought iron
592	6	8-2	500		12	40	1,000 for all	Cast iron	Lead and iron
593	5.5	12-4	265	377	150	32	100	Cast iron	Wrought iron
594	no returns							Wyckoff wood	
595	9	10-1	170		0	27		Cast iron	
596	no returns								
597	3 1/2	8-4	not given			22	25	Cast iron	
598	2		175	571	0	7	0		



No.	Name of Town.	Population, 1880.	Year of Returns.	Expenses.	Receipts.	Daily Consumption, Gallons.
599	Washington, N. J. .	2,142	no returns			
600	Tecumseh, Mich. .	2,111	no returns			
601	Red Bluffs, Cal. . .	2,106	Dec., 1882	not given		500,000
602	Birmingham, Conn.	2,103	Dec., 1881	\$ 1,940	\$ 6,744	unknown
603	Berwick, Pa. . . .	2,095	April, 1882	not given		unknown
604	Anamosa, Ia. . . .	2,083	Nov., 1881	700	1,643	24,600
605	Gouverneur, N. Y. .	2,071	Feb., 1882	700	1,800	unknown
606	Doylestown, Pa. . .	2,070	no returns			
607	Mount Joy, Pa. . . .	2,058	Dec., 1882	900	2,500	66,000
608	Sewickly, Pa. . . .	2,053	Dec., 1882	900	4,300	2,600
609	New Lisbon, Ohio. .	2,028	Dec., 1882	50	175	2,000
610	Canajoharie, N. Y. .	2,013	Jan., 1881	200	1,000	80,000
611	Bedford, Pa. . . . .	2,011	April, 1882	320	4,200	40,000
612	Louella, Pa. . . . .	2,000	Dec., 1882	800	water free	25,000
613	St. Louis, Mich. . .	1,975	Jan., 1882	350	1,000	unknown
614	Placerville, Cal. . .	1,951	no returns			
615	Attica, N. Y. . . . .	1,935	Dec., 1881	not given		unknown
616	Geneseo, N. Y. . . .	1,925	no returns			
617	Media, Pa. . . . .	1,919	Dec., 1882	1,200	4,028	125,000
618	Wingham, Ont. . . .	1,918	Dec., 1882	350	fire protection	unknown
619	Waterville, Me. . . .	1,917	no returns			
620	West Brookfield, Mass.	1,917	no returns			
621	Nevada, Mo. . . . .	1,913	no returns			
622	Warsaw, N. Y. . . .	1,910	Dec., 1882	100	1,600	unknown
623	Mount Morris, N. Y.	1,899	no returns			
624	Traverse City, Mich.	1,897	Dec., 1882	2,200	4,500	60,000
625	Rochelle, Ill. . . . .	1,893	June, 1882	not given		unknown
626	Monticello, Ia. . . .	1,877	Dec., 1882	1,000	1,000	25,000
627	Tilsonburg, Ont. . .	1,873	no returns			
628	Stroudsburg, Pa. . .	1,860	July, 1882	138	1,084	unknown



No.	Miles of Pipe.	Sizes of Pipe. Inches.	No. of Taps.	Daily Con- sumption per Tap.	No. of Meters.	No. of Fire Hydrants.	Annual Price per Hydrant by City.	Kind of Pipe.	
								Mains.	Services.
599	no returns								
600	no returns							Wyckoff wood	
601	14	7-2	360	1,393	0	28	\$ 180 for all	Double-riveted sheet iron	
602	6	8	330		0	38	30	Cast iron	
603	2		300		0	2	30		Lead and wrought iron
604	1.3	6-4			0	7		Cast iron	
605	1.5		89		0	16	38	Cast iron and cement - lined wrought iron	
606	no returns								
607	3.3		187	355	0	25	0	Cast iron	
608	12	12-3	312	8	0	38		Cast iron	Lead and gal- vanized iron
609	1.5	10-4	20	100	0	21	0	Cast iron and Wyckoff wood	Wrought iron
610	2	12-2	118	678	0	11	<sup>200</sup> for all	Cast iron	Lead
611	7	4	214	187	0	16		Cast iron	
612	1.5	8-4	17	1,470	0	18		Cast iron	Lead
613	2		75		0	26		Wyckoff wood	
614	no returns		Company	declines	to	give	Information		
615	4	10-3	73		0	20	50	Cast iron	Galvanized iron
616	no returns								
617	6.5	12-4	385	325	0	25	0	Cast iron	
618	1	6-6	3		0	6		Cast iron	
619	no returns								
620	no returns								
621	no returns								
622	5	8-3	150		0	24	33	Cast iron	
623	no returns								
624	2.5	8-4	not given			23	100	Wyckoff wood	Galvanized iron
625	2	8-6	40		0	24		Cast iron	Wrought iron
626	2	8-4	85	294	0	20		Cast iron	Galvanized iron
627	no returns								
628	3	6-3	75		0	14	23	Cast iron	



No.	Name of Town.	Population. 1880.	Year of Returns.	Expenses.	Receipts.	Daily Consumption, Gallons.
629	Salinas City, Cal. . . .	1,854	July, 1882	not given		unknown
630	Prescott, Ar. . . .	1,836	no returns			
631	Parker City, Pa. . . .	1,835	Dec., 1882	\$ 1,949	\$3,149	80,000
632	Uxbridge, Ont. . . .	1,824	no returns			
633	Waterford, N. Y. . . .	1,822	no returns			
634	Winsted, Conn. . . .	1,805	Dec., 1881	not given	4,704	unknown
635	Watsonville, Cal. . . .	1,799	Dec., 1882	2,046	not given	unknown
636	Benicia, Cal. . . .	1,794	no returns			
637	Tremont, Pa. . . .	1,785	no returns			
638	Vergennes, Vt. . . .	1,782	no returns			
639	West Cleveland, O. . . .	1,781	no returns			
640	Colusa, Cal. . . .	1,779	Dec., 1882	2,800	not given	100,000
641	Belvidere, N. J. . . .	1,773	July, 1882		1,500	2,800
642	Bethel, Conn. . . .	1,767	Mar., 1882	160	1,898	unknown
643	Summit Hill, Pa. . . .	1,763	no returns			
644	Salem, Va. . . .	1,759	Dec., 1882	208	804	7,500
645	Stonington, Conn. . . .	1,755	no returns			
646	Flemington, N. J. . . .	1,751	no returns			7,000
647	Oroville, Cal. . . .	1,743	no returns			
648	Marengo, Ia. . . .	1,738	April, 1882	Fire pro- tection.		unknown
649	Vancouver, W. T. . . .	1,722	April, 1882	2,000	not given	unknown
650	Plymouth, N. H. . . .	1,719	Dec., 1881	not given	1,500	50,000
651	Cape May, N. J. . . .	1,699		1,500		200,000
652	Windsor, Vt. . . .	1,696	no returns			
653	Modesto, Cal. . . .	1,693	no returns			
654	Austin, Nev. . . .	1,679	Oct., 1882	not given		30,000
655	Northborough, Mass. . . .	1,676		just completed		
656	Portland, Mich. . . .	1,670	no returns			
657	Slatington, Pa. . . .	1,634	Dec., 1881	100	900	unknown
658	Gilroy, Cal. . . .	1,621	Dec., 1882	not given		unknown



No.	Miles of Pipe	Sizes of Pipe, Inches.	No. of Taps.	Daily Con- sumption per tap.	No. of Meters.	No. of Fire Hydrants.	Annual Price per Hydrant by City.	Kind of Pipe.	
								Mains.	Services.
629	5	6-3	not given		0	22	0	Cast iron	Wrought iron
630	no returns								
631	5		205	390	0	31			
632	no returns								
633	1	fire pro- tection							
634	10		not given		0	85	0	Cast iron and cement-lined wrought iron	
635	6	8-1 1/2	300		0	16	\$600 for all	Sheet iron	Wrought iron tarred
636	no returns								
637	no returns								
638	no returns								
639	no returns								
640	5	7-2 1/2	151	662	2	14	300 for all	Wrought iron and wood	Wrought iron
641	3.5	12-6	30	93	0	30	100	Cast iron	Lead and gal- vanized iron
642	3.5	8-4	180		0	28		Cast iron	Galvanized iron
643	no returns								
644	3	8-3	118	64	0	12	0		Wrought iron
645	no returns								
646	1.5	no returns						Cast iron	
647	no returns								
648	1	6-4			0	8	0	Cast iron	
649	10	4-1	175		0	6		Cast iron and wrought iron	
650	2	8-4	60	833	0	27	25	Cement-lined wrought iron	Wrought iron tarred
651	5	12-10	no returns						
652	no returns								
653	no returns								
654	1	6-1/2	250	120	0			Riveted gal- vanized iron	Wrought iron
655	7	8-4	100		0	40		Cement-lined wrought iron	Wrought iron enameled
656	no returns							Wyckoff wood	
657	3	6-4	150		0	0		Cast iron	
658	5	13-3	135		0	7	0	Wrought iron	Wrought iron



No	Name of Town.	Population, 1880.	Year of Returns.	Expenses.	Receipts.	Daily Consumption, Gallons.
659	Berthier, Q. . . .	1,620	no returns			
660	Avon, N. Y. . . .	1,617	Dec., 1881	\$200	not given	200,000
661	De Kalb, Ill. . . .	1,598	Dec., 1881	2,000	\$600	24,000
662	Park City, Utah. .	1,542	July, 1882	not given		unknown
663	Midland, Mich. . .	1,529	no returns			
664	Kingston, Mass. . .	1,524	no returns			
665	Oxford, Pa. . . .	1,502	Dec., 1882	500	2,000	80,000
666	Cañon City, Col. .	1,501	July, 1882	2,000		400,000
667	Downingtown, Pa. .	1,480	May, 1882	not given		unknown
668	Le Roy, N. Y. . . .	1,468	April, 1882	fire protec- tion only		
669	St. Jerome, Ont. .	1,450	no returns			
670	Holly, Mich. . . .	1,443	no returns			
671	New Milford, Conn.	1,416	June, 1882	411	2,955	unknown
672	Bellevue, Ohio. . .	1,432	no returns			
673	Reynoldsville, Pa. .	1,410	no returns			
674	Constantine, Mich. .	1,405	Nov., 1882	250		unknown
675	El Paso, Ill. . . .	1,390	no returns			
676	Walton, N. Y. . . .	1,389	Dec., 1882	25	1,000	30,000
677	Delhi, N. Y. . . .	1,384	Dec., 1882	150	2,000	unknown
678	Athol, Mass. . . .	1,372	May, 1882	not given		unknown
679	Shelton, Conn. . . .	1,362	May, 1882	not given		unknown
680	Plainwell, Mich. . .	1,356	June, 1882	fire protec- tion only		
681	Salem, N. C. . . .	1,340	Dec., 1882	245	600	12,000
682	Richfield Springs, N.Y.	1,307	Dec., 1882	1,400	1,500	2,856
683	Evart, Mich. . . .	1,302	no returns			
684	Reno, Nev. . . .	1,302	no returns			
685	Tidioute, Pa. . . .	1,255	no returns			
686	Olympia, W. T. . .	1,232	no returns			
687	Crookston, Minn. .	1,227	Dec., 1882	in progress		2,000
688	Wadsworth, Ohio. .	1,219	no returns			



No.	Miles of Pipe.	Sizes of Pipe, Inches.	No. of Taps.	Daily Con- sumption per Tap.	No. of Meters.	No. of Fire Hydrants.	Annual Price per Hydrant by City.	Kind of Pipe.	
								Mains.	Services.
659	no returns								
660	7	4- 1/2	60	3,333	0	10	† \$45	Cement-lined wrought iron and gas pipe	
661	1.5	6-4	70	343	0	17		Wrought iron and cast iron	
662		8-2	100		0	6	0	Wood	Galvanized iron
663	no returns								
664	no returns								
665	4	8-3	300	266	0	35		Cast iron	Lead
666	3.5	10-4	204	1,961	0	21	75	Cast iron	Galvanized iron
667	7	6-3	200		0	1		Cast iron	
668	2	Fire protection	only			20	0		
669	no returns								
670	no returns							Wyckoff wood	
671	4.7	6-4	185		0	32	19	Cast iron	Galvanized iron
672	no returns						0	Wyckoff wood	
673	no returns								
674	4	10-4	41		0	37		Wyckoff wood	Galvanized iron
675	no returns								
676	3.8	6-1 1/4	90	333	0	22		Cast iron	Enameled, gal- vanized & plain iron, and lead
677	3.5	6-3	170		0	35	0	Cast iron	
678	11	12-4	300		10	50	50	Cast iron	Wrought iron
679	2.7		60		1	16			
680	1	6-4	3		0	6	0	Cast iron	
681	3	8-2	48	250	2	24	0	Cast iron	Plain and zinc- lined wrought iron
682	2.6	10-4	84	34	0	24		Cast iron	
683	1	4-1 5/8				10		Wyckoff wood	
684	no returns								
685	no returns								
686	no returns								
687	0.5		2	1,000	0	5			
688	no returns							Wyckoff wood	



No.	Name of Town.	Population, 1880.	Year of Returns.	Expenses.	Receipts.	Daily Consumption, Gallons.
689	Cheshire, Mass. . . .	1,200	Dec., 1882	\$ 50	\$ 1,500	unknown
690	Petrolia, Pa. . . .	1,186	Dec., 1882	1,956	2,754	40,000
691	Parkdale, Ont. . . .	1,170	Dec., 1882	800	not given	55,000
692	Blairsville, Pa. . . .	1,162	April, 1881	1,000	2,800	125,000
693	Cochituate Village, Mass.	1,161	Dec., 1882	300	1,737	unknown
694	Port Byron, N. Y. . .	1,146	Mar., 1882	fire protec- tion only		
695	Hanover, N. H. . . .	1,134	June, 1882	not given	950	6,500
696	Ebensburg, Pa. . . .	1,123	Feb., 1882	not given	1,100	unknown
697	Springvale, Me. . . .	1,116	no returns			
698	Tunkhannock, Pa. . .	1,116	June, 1882	300	1,400	unknown
699	Randolph, N. Y. . . .	1,111	no returns			
700	Boyerstown, Pa. . . .	1,099	no returns			
701	Reed City, Mich. . . .	1,091	no returns			
702	Oregon, Ill. . . . .	1,088	no returns			
703	St. Johnsville, N. Y.	1,072	no returns			
704	Yreka, Cal. . . . .	1,059	Dec., 1882	600	2,500	60,000
705	Warwick, N. Y. . . .	1,043	June, 1882	not given	700	unknown
706	Nunda, N. Y. . . . .	1,037	no returns			
707	Hollister, Cal. . . . .	1,034	no returns			
708	Kennett Square, Pa.	1,021	no returns			
709	Milford, Pa. . . . .	983	no returns			
710	Tombstone, Ar. . . .	973	Aug., 1882	not given		unknown
711	Sherburne, N. Y. . . .	944	in progress			
712	Greenwich, Conn. . .	942	April, 1882	not given		unknown
713	Dutch Flat, Cal. . . .	939	July, 1882	not given	3,600	unknown
714	San Mateo, Cal. . . .	932	no returns			
715	Unadilla, N. Y. . . .	922	just completed			
716	Wilmington, Cal. . .	911	no returns			
717	Lincoln, Mass. . . . .	907	Dec., 1882	600	600	unknown
718	Pioche, Nev. . . . .	900	Mar., 1882	not given		10,000



No.	Miles of Pipe	Sizes of Pipe, Inches.	No. of Taps.	Daily Consumption per tap.	No. of Meters.	No. of Fire Hydrants.	Annual Price per Hydrant by City.	Kind of Pipe.	
								Mains.	Services.
689	7.5	8-2	260		0	18	0	Cast iron and wrought iron	Wrought iron
690	5	3 $\frac{1}{4}$ -2	25	1,600	0	15	\$ 10	Wrought iron	Lead and galvanized iron
691	7.6	10-4	not given		0	55		Cast iron	Lead
692	2.8	8-3	270	463	0	18		Cast iron	Lead and galvanized iron
693	6	10-4	120		0	32	12	Cast iron	Tarred iron
694	3	6-4	26		0	24	0	Cast iron	
695	2	2-2	160	41	0			Lead	Lead
696	1.5	6-4	40		0	16		Cast iron	Wrought iron
697	no returns								
698	4	8-3	150		0	10	5	Cast iron	Lap-welded wrought iron
699	no returns								
700	no returns								
701	no returns							Wyckoff wood	
702	no returns								
703	no returns								
704	2	6-4	125	480	0			Wood and cast iron	
705	4				0	27		Cement-lined wrought iron	Wrought iron
706	no returns								
707	no returns								
708	no returns								
709	no returns						† 300 for all		
710	4	7-3	not given		0	53		Wrought iron	
711	in progress								
712	6.5	8-4	120		0	26	38	Cast iron	Lead
713	1.5	13- $\frac{3}{4}$	200		0	10		Sheet iron, cast iron, wood, galvanized iron, lead	Wrought iron
714	no returns								
715	no returns								
716	no returns								
717	3.2		26		0	11		Cement-lined wrought iron	
718	5.8	8-5	45	222	0	20		Double-riveted sheet iron	Wrought iron



No.	Name of Town.	Population, 1880.	Year of Returns.	Expenses.	Receipts.	Daily Consumption, Gallons.
719	Gunnison, Col. . .	888	Nov., 1882	\$2,000	not given	30,000
720	Jacksonville, Ala. . .	882	no returns			
721	State Centre, Ia. . .	880	Dec., 1882	100	\$55	unknown
722	Great Falls, N. H. . .	859	no returns			.
723	Emaus, Pa. . . .	847	Dec., 1882	100	800	unknown
724	Anaheim, Cal. . . .	833	no returns			
725	Longmont, Col. . . .	773	Dec., 1880	not given		unknown
726	Clarion, Pa. . . .	769	Dec., 1882	1,200	3,750	21,400
727	Winnemucca, Nev. . .	763	Dec., 1881	1,080	4,500	200,000
728	Campbellsville, Ky. .	760	no returns			
729	Candelaria, Nev. . .	756	no returns			
730	El Paso, Tex. . . .	736	no returns			
731	New Hartford, N. Y. .	710	no returns			
732	Edmore, Mich. . . .	704	no returns			
733	Canaan, Conn. . . .	700	Dec., 1882	50	700	unknown
734	East Saugus, Mass. . .	700	Dec., 1880	not given		
735	Chateaugay, N. Y. . .	680	Dec., 1881	not given	800	20,000
736	Lenox, Mass. . . .	664	Dec., 1882	not given	2,200	80,000
737	North San Juan, Cal.	656	no returns			
738	St. Henri, Que. . . .	650	no returns			.
739	Fair Haven, N. Y. . .	621	no returns			
740	Silver City, Nev. . . .	605	See	Virginia	City.	
741	Ithaca, Mich. . . .	600	no returns			
742	University of Virginia, Va.	600	Jan., 1882	not given		unknown
743	Garden City, N. Y. . .	574	no returns			
744	Sand Beach, Mich. . .	534	Dec., 1882	not given		unknown
745	New Carlisle, Ind. . .	530	Dec., 1882	350	350	5,000
746	Tioga, Pa. . . . .	520	Dec., 1882	not given		250,000
747	Andes, N. Y. . . . .	496	April, 1882	25	380	3,000
748	Grass Valley, Cal. . .	488	no returns			



No.	Miles of Pipe.	Sizes of Pipe. Inches.	No. of Taps.	Daily Con- sumption per Tap.	No. of Meters.	No. of Fire Hydrants.	Annual Price per Hydrant by City.	Kind of Pipe.	
								Mains.	Services.
719	4	12-6	60	500	0	36	\$ 100	Cast iron	Iron and lead
720	no returns								
721	1	6-6	9		0	8		Cast iron	Iron
722	no returns								
723	2		160		0	10			
724	no returns								
725	4	8-3	not given			26		Wrought iron	Galvanized iron
726	1.4		147	146	3	11			
727	6	5-5	140	1,429	0	10		Wrought iron	
728	no returns								
729	no returns								
730									
731	no returns								
732	no returns								
733	4	6-1	150		0	6		Cast iron	
734	1.2	8-6	60		0	12		Cement-lined wrought iron	Cement-lined wrought iron
735	3	6-4	100	200	0	14	14	Cement-lined wrought iron	Galvanized iron
736	5		105	762	0	6			
737	no returns								
738	no returns								
739	no returns								
740									
741	no returns								
742	2	5-3	not given		0	6		Cast iron	
743	no returns								
744	1.5	5-1 $\frac{3}{4}$	5		0	12		Wyckoff wood	
745	1	6-4	45	111	0	17		Wyckoff wood	
746	3.2	12-3	85	2,941	0	17	25	Wyckoff wood	Galvanized iron
747	1.5	6-3	100	30	0	20		Cast iron	Lead
748	no returns								



No	Name of Town.	Population, 1880.	Year of Returns.	Expenses.	Receipts.	Daily Consumption. Gallons.
749	Fairplay, Col. . . .	450	in progress			
750	Cloverdale, Cal. . . .	430	no returns			
751	Ephrata, Pa. . . . .	392	no returns			
752	Fort Snelling, Minn.	352	no returns			
753	Hyde Park, Vt. . . .	331	Dec., 1880	\$ 200	\$ 200	unknown
754	Pleasant Hill, Ky. . .	300	1876	1,000	no returns	
755	Mission San Jose, Cal.	246	Dec., 1880	40	600	20,000
756	Sanford, Fla. . . . .	220	in progress			
757	Hamilton, Nev. . . .	203	June, 1880	not given		unknown
758	Hamorton, Pa. . . . .	159	no returns		•	•
759	Bryn Mawr, Pa. . . .		no returns			
760	Chicopee Falls, Mass.		no returns			
761	Clifton Springs, N. Y.		no returns			
762	Columbia, Cal. . . . .		no returns			
763	Cornell University, N. Y.		no returns			
764	Dayton Soldiers' Home, Ohio,		no returns			
765	East Providence, R. I.		Supplied	from	Pawtucket.	
766	Findlay, Ohio, . . . .	4,633	no returns			
767	Harbor Grace, N. F.		no returns			
768	Lake Valley, N. M.		no returns			
769	Longueuil, Que. . . .		no returns			
770	Lyons, Mich. . . . .	747	no returns			
771	Menlo Park, Cal. . . .		no returns			
772	New Jersey Reform School, Jamesburg, N. J.		no returns			
773	New Sweet Springs, Mo.		no returns			
774	North Carolina Insane Asylum, N. C.		no returns			
775	Portland, N. B. . . . .		Supplied	from	St. John.	
776	Prospect Park, N. Y.		no returns			
777	Providence, Pa. . . . .		no returns			
778	Pullman, Ill. . . . .		no returns			



No.	Miles of Pipe.	Sizes of Pipe, Inches.	No. of Taps.	Daily Con- sumption per Tap.	No. of Meters.	No. of Fire Hydrants.	Annual Price per Hydrant by City.	Kind of Pipe.	
								Mains.	Services.
749			in progress						
750			no returns						
751			no returns						
752									
753	5	1- 1/2	50		0	0		Lead	Lead
754			no returns					Cast iron	
755	0.6	3-1 1/2	32	625	0	0		Wrought iron	
756			in progress						
757	14	3	125		20	20		Wrought iron	
758			no returns						
759			no returns						
760			no returns						
761			no returns						
762			no returns						
763			no returns						
764			no returns						
765		See Paw- tucket							
766			no returns						
767			no returns						
768			no returns						
769			no returns						
770		For fire purposes only						Wyckoff wood	
771			no returns						
772			no returns						
773			no returns					Wyckoff wood	
774			no returns						
775		See St. John (No. 64)							
776			no returns						
777			no returns						
778			no returns						



No.	Name of Town.	Population, 1880.	Year of Returns.	Expenses.	Receipts.	Daily Consumption, Gallons.
779	Richmond Furnace, Mass.		Dec., 1882	not given		
780	St. Cunegonde, Que.		no returns			
781	St. Gabriel, Que.		no returns			
782	San Buenaventura, Cal.		no returns			
783	Shelburne Falls, Mass.			Fire pro- tection.		
784	Phenix Furnace, N. Y.		Dec., 1882	100	0	
785	Turners Falls, Mass.		no returns			

The following were received too late for insertion in their proper order.

786	Hillburn, N. Y. . .	350	Dec., 1882	not given		unknown
787	Connecticut State Industrial School for Girls.		Dec., 1882	not given		unknown
788	Adrian, Mich. . .	7,849	no returns			
789	Big Shanty, Pa. . .		no returns			
790	Ridgeway, Pa. . .	1,100	no returns			
791	Alma, Mich. . . .	437				
792	Three Rivers, Mich.	2,525				
793	Coney Island, N. Y.		Dec., 1882	not given		unknown
794	Amesville, Conn. .	377	Dec., 1882	25		
795	Durango, Col. . .		in progress			
796	Portsmouth, Va. .	11,390	in progress			
797	Tyler, Tex. . . .	2,423	no returns			
798	Windsor, N. S. . .	3,019	in progress			
799	Cheyenne, Wyo. . .	3,456	no returns			
800	Independence, Mo. .	3,146	in progress			
801	Woodbury, N. J. .	2,298		700		
802	Anniston, Ala. . .	942				
803	Aberdeen, Miss. . .	2,339	Fire protection from four artesian wells.			



No.	Miles of Pipe.	Sizes of Pipe. Inches.	No. of Taps.	Daily Con- sumption per Tap.	No. of Meters.	No. of Fire Hydrants.	Annual Price per Hydrant by City.	Kind of Pipe.	
								Mains.	Services.
779	1	3-2	not	given				Cast iron and wrought iron	
780		no	returns						
781		no	returns						
782		no	returns						
783		Fire	protection						
784	1.2	4	8			7		Cement	Galvanized iron
785		no	returns						
786	1	6-2	37		0	0		Wyckoff wood	Galvanized iron
787	1.6	6	not given			2		Cement-lined wrought iron	
788		no	returns					Wyckoff wood	
789		no	returns						
790		no	returns						
791	1					10			
792	4					33			
793	6	14-4						Cast iron	Lead and iron
794	0.9	2 1/2	50			0		Wrought iron	Wrought iron
795		in	progress						
796		in	progress						
797		no	returns						
798		in	progress						
799		no	returns						
800		in	progress						
801									
802									
803		no	returns						







## Postscript.

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All information received during the progress of the printing of these tables, has been incorporated in them as far as possible. In a number of instances, it will be observed therefore, that statistics are given in the second table, relating to towns which are noted in the first table as having made "no returns," the data having been received after the earlier sheets had been printed.

Three towns, viz: 766, Findlay, Ohio, 802, Anniston, Alabama, and 803, Aberdeen, Mississippi, do not appear in the first table. The following should be added to the list, having been received since the tables were printed:

804, Pawtuxet, R. I.,	809, Ouray, Col.,
805, Petoskey, Mich.,	810, South Pueblo, Col.,
806, Bessemer, Col.,	811, Lincoln Park, Ill.,
807, Fort Collins, Col.,	812, Mendota, Ill.
808, Lulida, Col.,	

The following should be stricken out, it having been ascertained that, contrary to previous information, they have *no water-works*:

731, New Hartford, N. Y.,  
673, Reynoldsville, Pa.,  
422, Warren, O.

The compiler ventures to express the hope, that he will be promptly furnished with full statistics from the 278 Water Works, which have so far neglected to send returns.

May 1st, 1883.













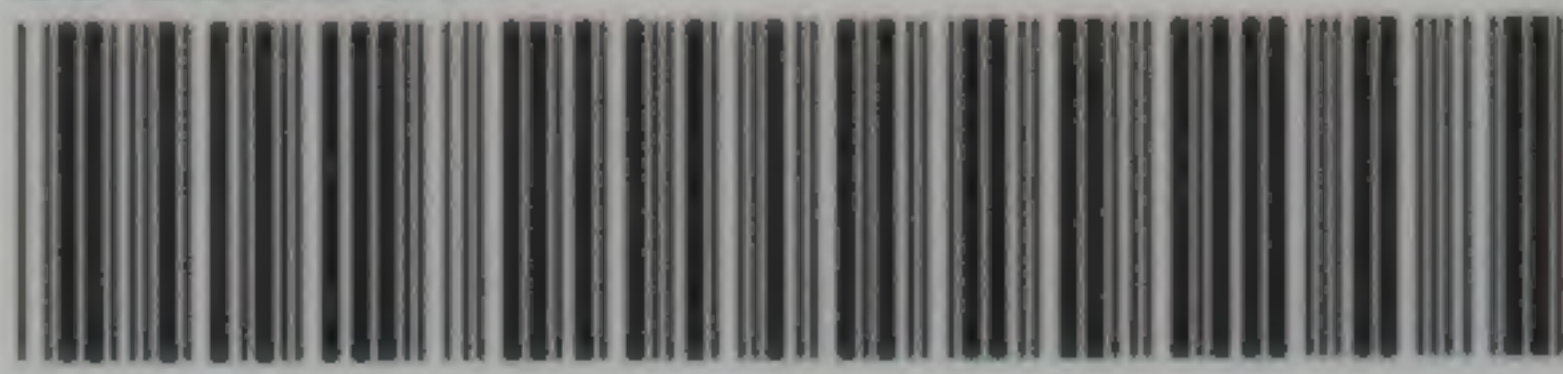


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